DOCUMENT RESUME

ED 193 858 EC 130 821

| | |
|---|---|
| TITLE | Project C.I.I.P. (Comprehensive Infant Intervention Program). Final Report 1978-1979. |
| INSTITUTION | Edgewood Independent School District, San Antonio, Tex. |
| SPONS AGENCY | Office of Education (DHEW), Washington, D.C. |
| BUREAU NO | 444AH0336 |
| PUB DATE | Jun 79 |
| GRANT | G007602077 |
| NOTE | 96p.: Parts are minimally legible. |
| EDRS PRICE | MF01/PC04 Plus Postage. |
| DESCRIPTORS | Biculturalism; Bilingual Education; *Disabilities; *Infants; *Parent Education; Poverty; Program Descriptions; Program Evaluation; *Stimulation |

ABSTRACT

The final report documents achievements of an infant stimulation program for mildly to severely/profoundly handicapped children, with special attention given to infants from low socioeconomic areas and bicultural/bilingual handicapped children. Accomplishment reporting touches on the following areas: direct and supplementary services for children's services, parent/family participation, assessment of children's progress, inservice training for project staff, training for personnel from other programs or agencies, demonstration and dissemination activities, involvement of teenagers to work with the infants under project staff supervision, and coordination with other agencies. Among 10 appendixes, which make up more than one half of the document, are parent interview information and staff caregiver information. (CL)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED193858

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

# PROJECT C.I.I.P.

## (COMPREHENSIVE INFANT INTERVENTION PROGRAM)

FINAL REPORT 1978-1979

BEST COPY AVAILABLE

EDGEWOOD INDEPENDENT SCHOOL DISTRICT
5358 W. Commerce Street
San Antonio, TX 78237

EC130821

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

# PROGRAM PERFORMANCE REPORT (Discretionary Grants)

FORM APPROVED
OMB NO. 51-R1091

Further monies or other benefits may be, but will not necessarily be, withheld under this program unless this report is completed and filed as required by existing law and regulations *(45 CFR 121, GS.1 FMC 74-7).*

**Part I**

All grantees with awards from programs listed under "General Instructions" above respond.

| 1. Date of Report: | 2. Grant Number: |
|---|---|
| June 30, 1979 | G007602077 |
| **3. Period of Report: From:** | **To:** |
| July 1, 1978 | June 30, 1979 |

4. Grantee Name and Descriptive Name of Project:

Edgewood Independent School District

Comprehensive Infant Intervention Program (#444AH0336)

Certification: I certify that to the best of my knowledge and belief this report *(consisting of this and subsequent pages and attachments)* is correct and complete in all respects, except as may be specifically noted herein.

| Typed Name of Project Director(s) ~~or Principal Investigator(s)~~: | Signature of Project Director(s) ~~or Principal Investigator(s)~~: |
|---|---|
| Isaura Barrera | |

**Part II *("Accomplishment" Reporting)***

A. All grantees, except for those with awards under 13.443 are to respond to this Section A. Grantees under 13.443 go to B of Part II.

All grantees with awards under 13.444 except those supported solely for "Outreach" activities are to follow the organization of categories listed below in presenting their performance reports. The categories are based on activities common to all Early Childhood projects with the exception noted above for projects solely supported for outreach activities.

(1) Direct and Supplementary Services for Children's Services
(2) Parent/Family Participation
(3) Assessment of Child's Progress
(4) Inservice Training for Project Staff
(5) Training for Personnel from other Programs or Agencies
(6) Demonstration and Dissemination Activities
(7) Coordination with other Agencies
(8) Continuation and Replication

The grant application for programs 13.445, 13.446, 13.450, and 13.520 provided for the following functions or activities as categorical headings in the budget and narrative sections:

| | |
|---|---|
| Research and Development | Dissemination |
| Demonstration Service | Preservice Inservice |
| Evaluation | Training |

Programs 13.451, and 13.452 do not usually require a breakout since the primary function or activity is intrinsic to the respective program.

For each of the above programs, functions, or activities *(as well as those of special import for certain programs: e.g., replication, advisory councils, parent involvement)* discuss the objectives and subobjectives presented in the approved application *(in narrative format)* in terms of:

(a) Accomplishments and milestones met.
(b) Slippages in attainment and reasons for the slippages.

Refer back to your application and utilize your quantitative quarterly projections, scheduled chronological order and target dates, and data collected and maintained as well as criteria and methodologies used to evaluate results for (a) and (b). For grantees under 13.444, in discussing training or personnel from other programs, include descriptions of types of training, institutions or organizations involved, and numbers of trainees and hours of training received.

Also highlight those phases of the plans of action presented in your application that proved most successful, as well as those that upon implementation did not appear fruitful. NOTE: Outreach grantees are to discuss accomplishments and slippages in terms of replication and stimulation of services, resources provided and field testing and dissemination and training in terms of types of personnel receiving training and the number of hours involved.

Grantees finishing this portion of Part II, go to C of Part II.

B. Reporting for Grantees under 13.443 *(Research and Demonstration).*

Discuss major activities carried out, major departures from the original plan, problems encountered, significant preliminary findings, results, and a description and evaluation of any final product. Either include copies of, or discuss information materials released, reports in newspapers, maga-

zines, journals, etc.; papers prepared for professional meetings; textual and graphic materials; completed curriculum materials and instructional guides, or drafts if in a developmental stage, special methods, techniques and models developed; scales and other measuring devices used.

When finished with this portion of Part II, 13.443 grantees go to C of Part II.

C. All grantees are to respond to this section C. Discuss the following:

(1) Unanticipated or anticipated spinoff developments *(i.e., those which were not part of your originally approved subobjectives, but which are contemplated within the purpose of the Education for the Handicapped legislation, such as new cooperative inter-agency efforts, a decision by volunteer(s) to pursue a career in special education, new public school policy to integrate handicapped children into regular classrooms, enactment of mandatory or other State legislation affecting early education, relevant new course offerings at universities, etc.).*

(2) Where outputs are quantified in response to any portion of Part II, relate quantifications to cost data for computation of unit costs. Analyze and explain high-cost units.

(3) Indicate other matters which you would like OE to know about *(e.g., community response to the project, matters concerning the project's working relationship with OE, technical assistance of OE staff, or any other relevant subject.).*

## Part III

All grantees with a Demonstration/Service function or activity, except for 13.444 grantees who are solely supported for "outreach" activities, are to complete Tables IA, IB, and IC. All grantees under 13.451, as well as those under other handicapped programs with a Preservice/Inservice Training activity are to complete Table II. All grantees under 13.444 except those who are supported solely for "outreach" activities, are to complete Tables IIIA and IIIB.

### Table IA – Demonstration/Service Activities Date

### Children

Enter actual performance data for this report period into the appropriate boxes. Use age as of the time of the original application, or the continuation application, whichever is later. On lines above line 11, count multihandicapped individuals only once, by primary handicapping condition, and indicate the number of multihandicapped in line 12. Data for lines 1 through 11 are for those directly served; i.e., services to those enrolled or receiving major services, and not those merely screened, referred or given minimal or occasional services.

| Type of Handicap | Number of Handicapped Served by Age | | | | | |
|---|---|---|---|---|---|---|
| | Ages 0-2 | Ages 3-5 | Ages 6-9 | Ages 10-12 | Ages 13-18 | Age 19 and Over |
| 1. Trainable Mentally Retarded | | | | | | |
| 2. Educable Mentally Retarded | | | | | | |
| 3. Specific Learning Disabilities | | | | | | |
| 4. Deaf-Blind | | | | | | |
| 5. Deaf/Hard of Hearing | | | SEE ATTACHED | | | |
| 6. Visually Handicapped | | | | | | |
| 7. Seriously Emotionally Disturbed | | | | | | |
| 8. Speech Impaired | | | | | | |
| 9. Other Health Impaired | | | | | | |
| 10. Orthopedically Impaired | | | | | | |
| 11. Total | | | | | | |
| 12. Multihandicapped | | | | | | |

If the data in the above table differ by more than 10 percent from the data originally presented in your approved application, please explain the difference.

FEB 26 1980

TABLE 1A

| Type of Handicapped | Age** 0-2 | Ages 3-5 | Ages 6-9 | Ages 10-12 | Ages 13-17 | Ages 18+ |
|---|---|---|---|---|---|---|
| 1. Trainable Mentally Retarded<br>2. Educable Mentally Retarded | 8 | | | | | |
| 3. Specific Learning Disabilities | 0 | | | | | |
| 4. Deaf/Blind | 0 | | | | | |
| 5. Deaf/Hard-of-Hearing | 1 | | | | | |
| 6. Visually Handicapped | 3 | | | | | |
| 7. Seriously Emotionally Disturbed | 0 | | | | | |
| 8. Speech Impaired/Language Delayed | 5 | | | | | |
| 9. Other Health Impaired | 3 | | | | | |
| 10. Crippled | 9 | | | | | |
| 11. TOTAL | 29 | | | | | |
| Multihandicapped in line 11 | 9 | | | | | |

*NOTE:

I would like to make a statement regarding the inappropriatness of this chart for 0-3 populations. Many of the C.I.I.P. children are simply "developmentally delayed"; except for the physical handicaps it is often difficult, sometimes impossible, and always inappropriate to try to label MR, LD and ED. In a majority of cases the children do not respond to tests well enough for sufficient criteria to be obtained. In other cases such as CP - delayed, it may be that initial signs do not bear out conclusions. Also, since Texas requires very specific criteria using standarized tests in many instances, developmental assessments do not meet this criteria. I have responded to the chart as accurately as I am able but I wish to not my disagreement with the request for this particular catergorization.

** All ages computed as of September 1, 1978

**Table IB**

**Project Staff Providing Services to Recipients in Table IA**

| Type of Staff | Number | |
|---|---|---|
| | Full-time | Part-time *(As Full-time Equivalents)* |
| Professional Personnel *(excluding teachers)* | | 3 |
| Teachers | 3 | |
| Paraprofessional | 2 | |

**Table IC**

**If applicable: Services to Those Handicapped Not Included in Table IA**

| Service | Number of Handicapped |
|---|---|
| Screened | 60 |
| Diagnostic and Evaluative | 32 |
| Found to Need Special Help | 32, only 28 could be served |
| Other Resource Assistance | None available |

**Table II**

**Preservice/Inservice Training Data**

| Handicapped Area of Primary Concentration | Number of Persons Received Inservice Training | Number of Students Received Preservice Training by Degree Sought | | | |
|---|---|---|---|---|---|
| | | AA | BA | MA | Post-MA |
| Multihandicapped | | | | | |
| Administration | | | | | |
| Early Childhood | 8 | 1 | | | 3 |
| Trainable Mentally Retarded | | | | | |
| Educable Mentally Retarded | | | | | |
| Specific Learning Disabilities | | | | | |
| Deaf/Hard of Hearing | | | | | |
| Visually Handicapped | | | | | |
| Seriously Emotionally Disturbed | | | | | |
| Speech Impaired | | | | | |
| Orthopedically and Other Health Impaired | | | | | |
| TOTAL | | | | | |

If data in Table II above differ by more than 10 percent from those in your approved application explain.

## Table IIIA
### Placement of Children Participating in Early Childhood Program During Reporting Period

Indicate the placement of children who left your project during the year covered by this report period.
*NOTE: Count each child only once by primary type of placement below.*

| TYPE OF PLACEMENT | | | NUMBER OF CHILDREN | |
|---|---|---|---|---|
| | | | FULL-TIME | PART-TIME |
| INTEGRATED PLACEMENT *(i.e., in regular programs with children who are NOT handicapped)* | Nursery schools | | | |
| | Day-care programs | | | |
| | Head Start | | | |
| | Pre-kindergarten | | | |
| | Kindergarten | | | |
| | Primary grades | First | | |
| | | Second | | |
| | | Other | | |
| SPECIAL EDUCATION PLACEMENT *(i.e., in classes only for handicapped children but situated in regular private or public school)* | Pre-kindergarten | | 28 | |
| | Kindergarten | | | |
| | Primary grades | First | | |
| | | Second | | |
| | | Other | | |
| INSTITUTIONAL PLACEMENT | Scheduled to remain in Early Childhood Program in coming year | | 11 | |
| | Other *(specify)* | | | |
| | | | | |

## Table IIIB

| Cumulative number of children entered into integrated placement *(if known)* prior to this report period → | NUMBER | Estimated retention rate of cumulative number in integrated placement → | PERCENT |
|---|---|---|---|
| | | | % |

PROJECT OVERVIEW

The Comprehensive Infant Intervention Program (C.I.I.P.) is an infant stimulation program for mildly to severely/profoundly handicapped children, with priority given to handicapped children from low socio-economic backgrounds, and with emphasis on the needs of bicultural/bilingual handicapped children. C.I.I.P. has been developed as a public-school-based continuum as its approach to services. Staff has been selected from multiple disciplines to provide therapeutic and stimulation services in the areas of gross motor development, perecptual-cognitive development, language development and socialization (general & self-help). In addition, the project helps parents to develop skills which enable them to effectively assist in their child's development.

Placement in the program is based on specific eligibility criteria which includes high-risk, developmentally delayed and/or specific handicaps, and is dependent on the educationally assessed needs of the individual infant and his family. A central core professional staff includes the project's director, a teacher physical therapist, a teacher speech therapist, home resource teacher, two teacher assistants, a part-time occupational therapist, a part-time nurse and a part-time physical therapist.

Carefully selected high school students are trained to work with the children under ther supervision of Project teachers and therapists. They receive high school credit toward graduation on the basis of their activities in the C.I.I.P. project.

Since infant education also involves parent education, parental involvement is a key element in the C.I.I.P. model. Parents are provided with counseling, as well as training in parenting skills. A peer-modeling training model has been developed. It is the philosophy of the project that parents must assume

FEB 2 6 1980

the major responsibility for their child's education even though they may not deliver specific interventions outside their daily home routines.

Infants are referred by parents, physicians and community agencies. A developmental appraisal process using the Developmental Assessment System follows the referral and forms the base for individual programs.

# PART II: ACCOMPLISHMENT REPORTING

1. Direct and Supplementary Services for Children's Services (Child Component, Obj. 1 & 2)

A. Accomplishments and Milestone Met

| OBJECTIVE | OUTCOME | |
|---|---|---|
| 1. Approximately 8-12 new handicapped infants (0-2 years) will be identified and screened to participate in C.I.I.P. | a. 6 | students returned from 77-78 |
| | b. 60 | new students referred |
| | c. 28 | students presently enrolled |
| | d. 0 | students still completing assessment |
| | e. 32 | total students served to date |
| 2. The handicapped infants will receive Medical evaluation and follow-up medical assistance | a. 23 | students received general medical evaluation |
| | b. 24 | students received audiological evaluations |
| | c. 7 | students received opthamological evaluations |
| | d. 32 | students received other evaluatio (OT, PT, ETC.) |

1. B. Slippages in attainment, reasons for slippages and end-of-project conclusions

Slippages

None Noted. Changes from mid-year indicate transfer, drops and new referrals.

Conclusions

Many more children were referred and were screened as needing services than could be served. This year the number of referrals were tripled from previous years as community awareness increased. There is a need for at least 6 classes such as C.I.I.P.'s to provide minimal coverage for the San Antonio area.

2. Parent/Family Participation (Parent Obj. 1, 2 & 3)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 1. Parents of handicapped infants enrolled in C.I.I.P. will increase their knowledge of and participation in Project activities as measured by (1) pre-post measures of information and (2) documentation of hours spent in Project activities. | a. Pre and post parent interview have been administered and completed by parents. For specific data analysis, see Appendix I.a<br>b. 85% of parent participated in the program at least 2 hrs./wk.<br>100% of parents participated in the program at least 2 hrs. /mo. |
| 2. Parents of infants enrolled in C.I.I.P. will increase their competencies in parenting-teaching skills, child management strategies, and observation and record-keeping as measured by (1) pre-post video tapes (2) completion of behavior record charts | a. 0 post-video tapes have been completed<br>0 parent have received training and completed charts<br>b. Due to the addition of a Social Worker and a Home Liason aide, this objective was achieved through group and individual assistance and counseling rather than through video tapes. |

(CONT.)

2. Parent/Family Participation (Parent Obj. 1, 2 & 3)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 3. Parents of children enrolled in C.I.I.P. will demonstrate growth in feelings, perceptions and expectations related to their child: his/her developmental level and other such areas, as measured by Pre-Post ratings on Parent Scale. | a. The developmental expectations checklist - a part of the Parent Interview - was administered. (see Appendix I)<br><br>b. Growth in this objective was also noted qualitatively in the change in comments and confidence in IEP meetings.<br><br>c. Regular group meetings were organized by the Social Worker to discuss feelings and expectations. Many parents came additional times to such meetings, and even begun to hold them in the absence of the social worker. |

2. B. Slippages in attainment, reasons for slippages and end-of-year conclusions

Slippages

None Noted. The addition of social service personnel allowed us to switch to a less formal more conversational mode of interaction/instruction better suited to our population.

Reasons

N-A

Conclusions

The addition of social service personnel which allowed us to use a less formal, more personal approach increased parent interest and participation. Their openness in questioning and expressing confusion as to what we asked/said became much more evident. My overall conclusion is that the use of such personnel is essential and much more beneficial than the more formal, pedantic approaches, at least for our population.

3. Assessment of Children's Progress (Child Component, Obj. 3)

A. Accomplishments and Milestones Met

OBJECTIVE

1. Handicapped infants enrolled in C.I.I.P. will receive assessment and programming services in approriate developmental areas including language, perceptual-cognitive, personal-social and motor development as measured by individual educational plans and by evidence of gain on pre-post measures of developmental level(s) in each area.

OUTCOMES

a. Number of assessments
   (1). 11 student completed September, December and May assessments
   (2). 11 students received only one assessment because of late enrollment dates
   2 received only one assessment due to late enrollment (apirl-may)
   (3). 2 students dropped program
   (4). Students on home program did not receive standard assessment

b. Evidence of gain
   (1). On IEP's
   30 students had completed IEP's at end-of-year (see Appendix II: Individual Performance Cards for specific information on gain on IEP objectives)

(2). On pre-post assessments of 22 total pre-post assessments: 11 were 9 months apart; 11 were 4-5 months apart, of these: 10 showed a gain in developmental tasks of at least 200% over that projected for the developmental rate calculated at time of pre-tests. 8 showed a better than 100% increase 4 did not maintain their developmental rate from pre-to post-testing. (see Appendix X: Pre-Post Assessments Summary for individual and group data.)

3. B. Slippages in attainment, reasons for slippages and projected changes

Slippages :

Four students did not gain as projected

Reasons

Several variables appeared to affect student gain: in two cases the children, parents, and staff all seemed to have great difficulty negotiating autonomy issues. In the other two cases, both visually impaired children, critical periods requiring vision were reached and compensatory intervention did not appear to be sufficient to maintain initial rates.

Conclusions

Overall, the program showed significantly good gains in language and socializations areas, with lesser gains in other areas and with minimal or no gain in the self-help area. There appeared to be a decrease in staff performance in these areas, as well as a correlated decrease in child behavior due to onset of specific developmental issues such as autonomy and separation. On examining the specific items/children, I believe that a more rigorous use of programming cards might have minimized these slippages.

3. Assessment of Children Progress (Child Component, Obj. 3)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
| --- | --- |
| 3. (CONTINUED) | c. Development of assessment instrument<br>The C.I.I.P. Guidelines have been refined during this period and are reported in this area since they have a direct bearing on evaluation of progress. The Guidelines functioned very effectively and provided useful and understandable information to parents as well as staff. |

1. Inservice Training for Project Staff (Staff Component, Obj. 2 & 3)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 2. C.I.I.P. staff members will increase their knowledge and skills in assessment, curriculum development and implementation and teaching-learning theory, and parent-interaction and communication skills as measured by gain on pre-post competency scales and observation instruments. | See detailed outcome description in Appendix IV: Staff Caregiver Information. In addition, staff members are learning Spanish, Sign Language and accruing credit toward a Child Development Associate (CDA) certificate. |
| 3. C.I.I.P. will develop a staff support system involving (a) a feedback flow between Director and Staff, (b) Resource Center for professional and instructional materials and (c) use of external consultants to provide both cognitive and affective input, as measured by positive ratings on Staff Support System Evaluation. | a. Monthly meetings utilizing the Transactional Analysis Model were initiated<br>b. Resource enter was set up |

4. B. Slippages in attainment, reasons for slippages and projected changes

Slippages

None Noted. (See detailed discussion Appendix V)

5. Training for Personnel from Other Programs or Agencies (Demonstration and Dissemination Component, Obj. 1)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 1. C.I.I.P. will disseminate a model for delivery of services to handicapped infants as measured by production and dissemination of a document showing and explaining model's components, and by participation of other professionals in visits to Project and in selected inservice sessions. | 1. "Philosophy and Program Desciption completed and disseminated to 35 professional across Texas to date.<br>2. 3 inservices held, all included Edgewood personnel from other Special Education programs.<br>3. The Developmental Assessment System (C.I.I.P. Guidelines) was presented at national director's conference; one Bi-State Conference and one statewide conference |

6. Demonstration and Dissemination Activities (Obj. 1 & 2)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 1. C.I.I.P. will disseminate a model for delivery of services to handicapped infants as measured by production and dissemination of a document showing and explaining model's components, and by participation of other professionals in visits to Project and in | 1. "Philosophy and Program Description" completed and disseminated to 35 professionals/programs across Texas<br>2. 30 visitors to Project<br>3. 3 training sessions shared with other Edgewood Staff |
| 2. C.I.I.P. staff will develop a Project information package consisting of (a) brochure, (b) slide-tape, (c) informal letter and (d) newsletter as measured by documentation of completion | 1. Brochure completed<br>Slide-Tape compiled for local presentation |

Other Activities

Note: Several of C.I.I.P.'s objectives were not addressed in the suggested categories. These are presented here following the same format.

9. Staff Component (Obj. 1)

A. Accomplishments and Milestone Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 1. C.I.I.P. staff will identify and implement staffing patterns appropriate to a public-school-based Project as measured by documentation of needs, role descriptions and staff feedback. | 5 full-time staff hired<br>3 part-time staff hired<br><br>Positions include:<br><br>Teacher/Physical Therapist<br>Teacher/Speech Therapist<br>Home Resource - Teen Tacher<br>Social Worker<br>Occupational Therapist<br>Home Liason - Teacher/Assistant<br><br>(For role descriptions, See Appendix VI) |

9. B. Slippages in attainment, reasons for slippages and projected changes

Slippages :

None Noted.

10. Teen Component (Obj. 1, 2, & 3)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 1. Five to seven teens will be selected to assist in delivery of services to handicapped infants in the Center-Based program. | 6 teens were selected<br>3 teens were terminated |
| 2. Teens participating in C.I.I.P. will increase their knowledge of handicapping conditions, families and parenting and infant curriculum as demonstrated by mastery of training modules in these areas. | Teens have received instructor-directed tr as follows: |

| a. Areas | Mid-Year | Ja |
|---|---|---|
| 1. general birth info - | 10.5 hrs. | |
| 2. child development - | 28 hrs. | |
| 3. handicapping condition - | 29 hrs. | 1. |
| 4. observation & assesment - | 4.5 hrs. | 31. |
| 5. materials - | 2 hrs. | |
| 6. methods & techniques- | 0 hrs. | 27. |
| 7. curriculum content - | 0 hrs. | 18. |
| 8. data charting - | 0 hrs. | 44 |
| 9. the family system - | 4.5 hrs. | |
| 10. general requirements (project, tests, etc)- | 19.5 hrs. | |

10. Teen Component (Obj. 1, 2, & 3)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 2. (CONTINUED) 10.A | b. Formats — Mid-Year — Jan-May |
| | 1. lecture — 14.5 hrs. — 12 hrs. |
| | 2. discussion — 35.5 hrs. — 22.5 hrs. |
| | 3. media — 2.5 hrs. — 0 hrs. |
| | 4. observation of child — 9 hrs. — 3 hrs. |
| | 5. field trips — 3 hrs. — 3 hrs. |
| | 6. supervised practice — 0 hrs. — 84 hrs. |
| | 7. other: |
| | testing — 9 hrs. — 4.5 hrs. |
| | individual work — 10.5 hrs. — 0 hrs. |
| | observation — 1.5 hrs. — 1.5 hrs. |
| 3. Teens will increase their skills in sensory stimulation, language development, play techniques, and observation and record-keeping as measured by mastery of training modules... etc. (This objective not applicable till January as practicum does not begin till then). | a. Pre and Post Tests were administered for the following modules at mid-year: |
| | I.1. Intro to Special Education<br>I.2. Intro to the Special Child<br>I.3. Families and Parenting<br>I.4. Infant Curriculum<br>I.4.A. The Birth Process<br>I.4.B. Motor Development - Normal & Atypical<br>I.4.C. Pre-Speech & Language Dev. Norm. & Atyp.<br>I.4.D. Perceptual-Cognitive De. Norm. & Atyp.<br>I.4.E. Social-Emotional Dev. Norm. & Atyp.<br>I.4.F. Curriculum in action |
| (See Appendix IX: Teen Caregiver Behavior for detailed discussion) | b. "... the teens exhibited substantial growth during their training period..." |

27

10. Teen Component (Obj. 1, 2, & 3)

A. Accomplishments and Milestones Met

| OBJECTIVE | OUTCOMES |
|---|---|
| 3. (CONTINUED) 3.b. | b. Pre and Post were administered on these remaining modules:<br><br>II.1 Behavioral Objectives<br>II.2 Teaching Techniques<br>II.4 Teaching Research Model<br><br>c. (For specific analysis of pre-post data see Appendix VII: Teen Achievement)<br><br>d. See Appendix VIII: Teen Classroom Environment for additional data |

10. B. Slippages in attainment, reasons for slippages and projected changes

Slippages

(No changes from mid-year)
Low number of Teens
Delay in implementation of practicum

Reasons

Difficulities coordinating with High School schedule

Conclusions

While this component is a valuable, coordination with High School personnel continued to be a problem. I believe that the designation of a teacher at the high school, such as the child dev. teacher, to help coordinate the program would greatly facilitate its implementation.

7. Continuation and Replication

A. Accomplishments and Milestone Met

Activities to date are:

(1). contact with Texas Education Agency to research state level funding sources

(2). work with Texas' Infant Consortium to encourage 0-3 legislation for the handicapped

(3). contacts with other local agencies

(4). exploration of options for local funding: discussion with superintendent and associate superintendent

(5). contact with Louisiana State Dept. (EC-H) for possible replication sites

7. B. Slippages in attainment, reasons for slippages and projected changes

Slippages :

The major slippage in this area has been the failure to secure project continuation other than for the visually impaired population. This population is eligible for state funding 0-21. Other children on C.I.I.P. rolls could be served only through the use of local funds and these were not available.

Conclusions

Greater effort to secure legislation for all handicapped children 0-21 is needed. A bill brought to the House from the Senate this year was not acted upon.

8. Coordination with other Agencies

A. Accomplishments and Milestones Met

Coordination was continued between C.I.I.P. and the following agencies:

Floresville ISD
High Risk Infant Clinic
MHMR Program
Easter Seal Rehabilitation Center
Cerebral Palsy Treatment Center
Incarnate Word College
St. Anthony's Special Education School

8. B. Slippages in attainment, reasons for slippages and projected changes

Slippages :

None.

Part II. B.

1. Unanticipated or anticipated spinoff development

   a. The increased number of referrals from Birth Defects Clinic

   b. The referrals made on recommendations from parents whose children are already participating

   c. The integration of Spanish-dominant, English-dominant, and deaf children into one tri-lingual curriculum.

   d. The adoption of C.I.I.P.'s assessment instrument for use by the district's 4 S/Ph units

   e. Contact and coordination with Louisiana State Dept. for Bi-State Conference (went well, many requests for next year)

APPENDICES


| | | |
|---|---|---|
| APPENDIX | I: | PARENT INTERVIEW INFORMATION |
| APPENDIX | II: | INDIVIDUAL PERFORMANCE CARDS |
| APPENDIX | IV: | STAFF CAREGIVER INFORMATION |
| APPENDIX | VI: | JOB DESCRIPTIONS |
| APPENDIX | VII: | TEEN ACHIEVEMENT |
| APPENDIX | VIII: | TEEN CLASSROOM ENVIRONMENT |
| APPENDIX | IX: | TEEN CAREGIVER BEHAVIOR |
| APPENDIX | X: | PRE-POST ASSESSMENTS SUMMARY |

# APPENDIX I: PARENT INTERVIEW INFORMATION

## PARENT PARTICIPATION

The Edgewood Comprehensive Infant Intervention Project planned that parents would be an integral part of the program. Their inclusion had three major aims:

1. It was expected that their assistance during instruction would make it possible to accomplish more within the time the children were in the center.
2. Project personnel could teach the parents the techniques needed for home instruction of the child.
3. Through counseling, more realistic attitudes could be fostered so that the child would have a better chance of developing to full potential.

Initial screening visits were conducted, generally by the social workers but sometimes by the instructors, to assure that the children most in need of the services would be included and to encourage the parents to attend the sessions and participate in the activities.

Activities to help the parents feel involved and to teach them some of the knowledge that would help them understand the program and their children were conducted throughout the year. These sessions were conducted by the social workers, the director, and the instructors.

The social workers, the director, and the paraprofessionals were bilingual in English and Spanish; any instruction or counseling could be done in the most comfortable language of the parent, thus ensuring a more complete understanding of the instruction and advice. The instructors could express some ideas in Spanish, even though they were not bilingual, and this facility was helpful.

Home visits during the year facilitated the assistance to the families in obtaining certain services that might be needed. Appointments with health and rehabilitation authorities, help in processing applications for health or welfare services, and general aid in solving family problems were available. In addition, the home visits served to provide observation opportunities on the instruction given by family members in the home, as well as the possibility of reinforcing instruction about how to care for and teach the children.

### Entry Interviews

Interviews with a structured guide were conducted with 100% of the parents of the children that entered the program. These provided information about the parents' perceptions of the child at entry and their expectations for the future. The items probed in the interview included:

1. Description of the child's problem.
2. Statement of the child's greatest need.
3. Statement on the child's "best" ability.
4. Estimate of the parent's confidence in being able to teach the child.
5. Parental prediction of probable progress by age six.
6. Parent's perception of problems with the child at home.
7. Estimate of parent's ability to handle the problem.
8. Statement elicited about parental frustrations with the child.
9. Declaration of what the parent would like to learn.

10. Willingness to meet with parents of other handicapped children.
11. Statement of problems with the child outside the home.
12. Disagreements between the parents about how to handle the child.
13. Estimate of time available for the other children in the family.
14. Difficulties in talking with others about the handicapped child.
15. Estimate of exposure of child to environments other than the home and health facilities.
16. Estimate of the child's functioning level.
17. Estimate of child's gross motor functioning;
    estimate of child's perceptual-cognitive functioning;
    estimate of child's socialization functioning;
    estimate of child's language functioning.
18. Commitment to attend the project instruction with the child.
19. Desired activities through the project for the parent.

An analysis of the replies gave information to the social workers and the caregivers so they could plan those activities that would be most beneficial to the child and to the parent, especially in the area of developing a positive but realistic attitude about the child and its probable future progress.

The parents were allowed to complete the guide by themselves in the center or at home or a social worker or one of the paraprofessionals would assist them with its completion. The guide was translated to Spanish when needed. About half the parents completed the instrument by themselves and about half requested and received assistance in supplying the information for some or all the items.

A part of the difficulty the parents experienced in completing the questionnaire or in not completing it, causing the social worker to have to pursue it with them, appeared to be a reluctance to state their feelings about many of the items in writing. Also, some of them had not thought much about the future; their perceptions appeared to be concerned with the present almost exclusively. A few were mentally refusing to face the probable future.

An examination of the entry interview responses found them to be almost evenly divided among three categories:

1. Those that unduly high expectations coupled with refusal to recognize the severity of the problem.
2. Those that understood the child's problems and probable development.
3. Those that felt "defeated" about the child's future progress.

The major psychological services provided to the parents concentrated, of course, on those in the first and third categories: those that expected too much and those that expected too little.

The cognitive services supplied included specific activities that could be carried out with the child in the home, the professionally estimated phases through which the child would progress, and information about the services of which the parent should avail himself across the years. While not all the information was "accepted" by the parents, that is, they did not always agree to the professional estimates, this phase of the instructional and counseling program tended to be more successful than the others. A part of this success was engendered through assisting the parents with some of the appointments, applications, and other service obtention activities. That is, the help appeared to raise the standing of the worker or instructor in the estimation of the parent and with this confidence secured, they tended to "listen" to other advice and training more. In other

words, concrete assistance helped them believe that the project personnel did indeed care and that therefore their advice was more likely to be of value.

## Activities with the Parents

A wide variety of activities was conducted with the parents. Meetings were held at the center that presented information about working with handicapped children, gave the parents an opportunity to ask questions and put their feelings into words, and to discuss their child's problems with parents of other handicapped children. Structured activities were a part of each session with parents, activities that would bear on needed information but that would not be threatening to a specific parent. Thus the focus of generalized instruction allowed the parents to participate on a non-personal level until they felt able to present their own personal problems and feelings.

Some of the activities, and an important element of the parental involvement, were those that had no direct instruction or counseling scheduled. Small parties, social functions, and the opportunity to meet both the personnel of the center and of other parts of the district were useful components. Great effort was made to include each parent into the preparation and conduct of these programs. Helping with the work of putting on these affairs, contributing their "favorite" dishes to the potluck meals, and other contributions of the parents helped them feel worthy in the eyes of the group and thus raised their own estimates of themselves.

Many of the parents learned a great deal about their children and about how to teach them in the center and at home. While only about half the parents were in regular and substantial attendance (many worked and could not spend more time), all of them spent some time in the center. Those that attended fairly often were, of course, those that learned more and became more skilled at the instructional/developmental activities needed to help the child progress. Most of these parents showed admirable growth through this participation. They became more comfortable with the caregivers, with their children, and with themselves.

One of the most important elements of the parental involvement developed because of some deficiencies of some of the caregivers. One professional, particularly, and another at times, had difficulty in relating to the parents and establishing a rapport that would allow for a maximum of learning during the instruction. This "distance" was felt by some of the parents. Further, either because these two professionals felt some deficiencies in their own work with the children, they tended at times to partially withdraw from the instruction, either leaving the work to be done by one of the paraprofessionals or to the parents. In three cases, especially, the parents perceived the difficulties. The rapport that had been established by the paraprofessionals, the social workers, the director, and the evaluator made it possible for these parents to discuss the problem with them and seek help in overcoming the problem. Some improvement was possible through this communication. The situation emphasized the importance of the utilization of social workers in a handicapped infant program, and notably the use of social workers that are able to relate to parents and bridge any gap between professionals and parents. In the case of this project, the social workers' activities were exemplary and contributed importantly to the work of the center.

## Exit Interviews

It was expected that as each child completed the instruction that could be provided, the parent would again be interviewed. In most cases, the child was referred to another agency upon completion of the work with the center and a great deal of "transmittal" and assistance work was needed in this process. Because of the urgency of this work, many of the exit interviews were not completed, that is, the written guide was not answered fully or not returned to the social workers. In most cases, the interviews were conducted but they concentrated on the information that needed to be conveyed and the written guide was neglected.

Of the twenty-five percent that was completed, the guides accounted for nearly half those whose children had spent an extended time under center instruction. That is, most of those that were not completed were those cases in which the child spent a short period in the center. Thus, the replies that were obtained tended to be those that would be most likely to show progress across a reasonable time period.

The description of the child's problem improved in all but one case. The parent was able to state the problem quite accurately in all other cases. In that one exception, the parent began at entry with the statement, "no problem," and that statement remained in the exit interview. While that parent was very cooperative during the year and appeared to learn many important techniques, she was unable either to grasp the severity of the problem or to acknowledge it.

The statement of the child's greatest need was often quite general in the entry interview and frequently was actually a statement of the parent's need rather than that of the child. The exit statements became more exact and more specific. More details were included in the statement and in most cases, they were quite accurate, at least over the short run.

The statements about the children's "best" abilities tended to remain much the same between the entry and exit interviews. They were usually stated more specifically after involvement but they still tended to be the "qualities" the parent perceived rather than technical information.

The greatest improvement between the entry and exit interviews occurred in the case of the parents' confidence to handle the children's problems. Every interview showed an increase in this estimate; two showed dramatic changes in a positive direction.

Parental prediction of probable progress by age six also improved. It should be noted, however, that the predictions in the entry interview tended to be unrealistic in some cases. Discussions with the parents appeared to show that the exit predictions were more accurate.

The parents' perceptions of problems with the child at home at entry seldom were very exact. They tended to be generalizations or to deny that there were important problems. The exit perceptions were more detailed and more specific, demonstrating an important progression toward improvement.

Estimates of the parents' abilities to handle their children's problems rose considerably across the time period. The additional techniques they had gained during the instruction, together with the counseling provided by the social workers, appeared to be mainly responsible for this progress.

The entry statements about the parents' frustrations had been about half general and about half specific. Across time, several changes occurred but they were not necessarily in the same direction. Usually, there was some more specificity to the statements but they were not necessarily what would be expected. There appeared to be some tendency to answer as they thought they should answer.

The declarations about what the parents would like to learn changed radically across the time period. Phrased usually in very general terms at entry, they were quite specific at exit. While professionals might not agree in every case that the declaration was about the most immediate problem, they certainly showed an increased awareness within the parents of what they thought should be taught them.

Parents were willing to meet with other parents of handicapped children at both entry and exit, at least in their statements. Since the participation in the parental involvement meetings had been quite good, the willingness appeared to be real. They should have further opportunities to participate in this type of program.

The statements of problems with the child outside the home did not change much across time. It is likely that the problems had, in fact, not been alleviated greatly, due to the emphasis on other facets of the children's behaviors during the instruction.

Disagreements between the parents about how to handle the child were often denied in both the entry and exit interviews. Observations of parental behavior and information gleaned from general conversation tended to show that except in one case, no great disagreement existed. Whether or not the project had helped with this possible problem could not be ascertained.

Estimates of time available to spend with the other children in the family did not change between the two interviews. While presumably the increases in working in instructional activities might have changed that availability, no change could be measured from this instrument.

Difficulties in talking with others about the problems with the handicapped child apparently decreased during the year. The replies showed some change. Most importantly, the evidence of the discussions among the parents during their participation in center activities demonstrated a great deal of freedom to consult and counsel about problems. This may have been one of the most important changes that occurred.

The estimates of exposure of the child to environments other than the home and health facilities did not differ much between the entry and exit interviews. It seemed apparent that the children were, in most cases, that the family circumstances dictated that the parents take the children to various places in the course of conducting their day to day activities.

The estimates of the children's general functioning level changed but the changes were in both directions - forward and back. It would be assumed that these changes were useful, however, since they tended to more nearly agree with those of the caregivers at exit interview time.

The estimates of the children's functioning in gross motor, perceptual cognitive, socialization, and language activities were very erratic at both entry and exit. About as many were increased as were decreased. It could be noted that very specific activities tended to be answered more accurately; those that were harder to perceive or measure were more likely to be unrealistic. In general, there was a tendency to believe that the child could accomplish more over time. This was particularly evident in the perceptual cognitive functioning items. Some encouragement had been achieved in the language area but the increases were less general.

The commitment to work with the center or other programs for the betterment of the child was high at entry and remained high at exit. While it is expected that progress was actually registered, that is, that the parents were even more willing, the nature of the item in the questionnaire did not make it possible to measure any differences.

The last item, desired activities for the child, was answered quite generally at entry, reflecting generally what they knew about the instructional activities. They became much more specific at the conclusion of the program, indicating a considerable increase in the amount of information the parents held.

In summary, the entry and exit interviews were useful to the program. The information, if it could be transmitted to the next program into which the child goes, should be of help to the caregivers. Even when the parents' replies were not accurate from the view of the professionals, they represented real perceptions by the parents and thus subject to further instruction.

## Summary

The Edgewood Comprehensive Infant Intervention Project increased its efforts to involve parents from the 1977-1978 year to a high level in 1978-1979. Additional social worker time was added and this permitted a much more intensive work in the homes and with the parents at the center. The level of the work conducted by the social workers was very professional and demonstrated a comprehension of parents and of their problems that furthered the instruction a great deal. The social workers established a good rapport with all the parents and they were able to discuss nearly any needed topic with them, an important improvement in the general approach between the two years.

The entry and exit interviews of 1978-1979 were more exact than the previous year. No doubt the extra assistance from the social workers had helped make this possible. In most cases, the changes between the entry and exit replies were in the direction that would be expected and demonstrated some degree of development of the parent in comprehending their child and in dealing with him.

Some improvement in the interview instrument is recommended. Mainly, this would include the addition of more categories of reply so that the parents could make more differentiation in their estimates about the children's progress and about their own perceptions. Most of the items had only two possible choices and this restricted the responses unduly. A second improvement, of course, is some way to increase the number of exit interviews gathered. While the percentage did improve across the years, still further increases were indicated.

APPENDIX II: INDIVIDUAL PERFORMANCE CARDS

## PERFORMANCE CARDS

The Edgewood Comprehensive Infant Intervention Project uses performance cards for those instructional objectives that best lend themselves to direct measurement. The cards are supplemented by detailed lesson plans and by narrative descriptions of the objectives instructional means, and the degree of progress measured. The narration sheets also contain the instructors' general comments about behaviors, modification attempts, and subjectively assessed outcomes - in addition to the quantifiable measurement. The objective measures are included. Thus, the narratives plus the performance cards provide a complete record of the instruction and its consequences · whether positive or negative. Since not every attempted behavior modification lends itslef to objective measurement, nor could the caregivers maintain complete details on all the innumerable items of instruction, the performance cards are of particular importance in securing a balance between general assessment and objective measures.

The paraprofessionals and the teen component members often assist the professionals with the activities being measured on the performance cards. They may also at times help the professionals in the record keeping itself but always under supervision of the professionals. The cards, then, represent only the work of the professional caregivers.

The director and the evaluator examined the performance cards several times during the year. The information is noted in brief narrative form and then used to help ascertain the types of activities that should be occurring in the classroom. In addition, both the director and the evaluator met with each of the professionals after each examination of the performance cards to provide assistance in maintaining the cards at as high a level of formatting and accuracy as possible. This formative activity of the evaluator was also reported in detail to the director to help keep her uptodate on the progress of the professionals in this important task.

The combination of internal and external evaluation efforts was a very useful tool in assisting the program measurement goals. The progressive approach, used in the actual research into the cards and the training of the caregivers in their completion, then, is reported herein for the academic year, 1978-1979, providing an across time description of the process and the progress with the measurement. Also, since two of the professionals were on the staff in 1977-1978, their two year progress is reported separately and the overall, that is, the group process is also reported.

### Objectives

The instructors that returned from the previous year were considerably more adept at stating their objectives in quantifiable terms than the new one. Few changes were needed in the objectives themselves for these two. A few objectives were incomplete but none was double - containing more than one theme. Out of the first 28 cards examined for the returning professionals, only six unmeasurable elements were encountered, demonstrating unusual quality. Suggestions for modifying some of the verbs used in the objectives cleared up four of these six; only two, then, had to be restated.

The new professional had the same kind of difficulties most beginners have with objectives: incomplete, unmeasurable, and incongruent verbs. The necessary corrections were made and with the help of the director and the returning professionals,

the new instructor's skills in formulating the objectives increased quickly and did not need many changes thereafter.

In the November, January, April, and May examinations of the performance cards, no major modifications of the objectives were needed. In a few cases, they were reworded for more clarity but they were not, per se, incorrect.

## Criteria

The performance cards require that the criteria for goal achievement be listed separately from the objectives, an exemplary format for clear specification. As with the objectives, the criteria needed some minor adjustments during the first fall examination and a few again in November. Subsequently, only three sets of criteria were changed during the rest of the year. The most frequent error in the criteria was the inclusion of an activity (means), a mixture criteria and time frames, and/or a combination of the criteria with the achievement to be reached. The clarification of these in the early conferences appeared to have reduced this usual confusion to nearly nothing.

As would be expected from the discussion of the early objectives, some unmeasurable criteria were also listed. The caregivers comprehended the necessity for eliminating these almost from the beginning, and they did not occur thereafter. The confusion of time frame and achievement was less easily remedied since they are closely interrelated in performance. The criterion for total success (e.g., distinguishes 4 of 5 pictures correctly) caused difficulty during the instructional trials. Quite naturally, most children did not achieve the ultimate goal but made some progress (e.g., distinguished 3 of 5 pictures correctly). The trial described in the example was sometimes judged as a failure rather than the rather substantial progress it represented over a previous trial when the child could recognize only one picture of the group.

It should also be pointed out here that typically for instructors with a year or two of experience with performance objectives, there was some confusion between the measurement and the instruction. While obviously if a child correctly identifies a series of pictures or objects during the instruction, no direct measurement is needed. On the other hand, many of the tasks were unknown to the children, thus the first few attempts to teach them a set of skills should not be included as the measurement. Not only is this in error in principle, it also increases the amount of record keeping the instructor must do, thus interfering with other work that is needed.

During the first year, it became clear that the criteria could not be treated in isolation from the graph maintained on the back of the card so the evaluator taught the two in conjunction with each other. Ultimate success (goal) was listed separately and was to be used only for changing the objective and/or the activity; it was not listed for day-to-day measurement. This separation also had the advantage of clarifying in the instructors' minds whether an item within an activity was the appropriate criterion, especially in long or complicated series, or whether the set itself was the most important achievement, that is, to measure the child's progress within the set. This same instruction had to be repeated at the beginning of the year. It appeared to be the most difficult task in setting up the card so that the children would be measured appropriately to their stage of learning. One unexpected result, however, was that the caregivers then began to state very *limited* objectives or they divided the criteria into almost *minute* changes.

This tendency persisted throughout the year and almost all of the modifications indicated were of this type. Even in the May examination, some of the new cards were found to contain this problem.

Unfortunately, few self help behaviors were included in the performance cards. A superficial assessment of the progress of the children in this regard seemed to show advancement. The evaluator should have examined the narrative reports more closely and more often since most of the self help activities were included within them.

Despite these persisting weaknesses, none of which was large nor interfering with the approaches to the instruction of the infants, the quality of the performance cards was high. In fact, if the needed modifications were balanced against the total number of performance cards, they would be found to make up a very small proportion.

## Activities

The two returning professionals, as would be expected from their experience, did not engage in any instructional activity deemed unnecessary or inappropriate for the condition of the child nor for its stage of development. Further, the activities were quite accurately described on the performance cards, particularly from the viewpoint of what the pupil was to do. The activities were almost always of very high quality and very directly related to the growth expected of the child.

This was not always the case with the new caregiver. Either because she was a beginning professional or because she had some difficulty in determining what the appropriate activity should be, there were occasions when a child simply could not achieve within the instruction. In some cases, it was because the activity was too advanced. In most cases, however, it was because the caregiver did not instruct the child in the activity to be carried out. Some conditioning was done; often this was performed by one of the paraprofessionals. Although both the director and the evaluator conferenced with the caregiver on this problem, some of these cases remained into the last month of instruction. There seemed to be some basic lack of sensitivity that interfered with her assessments of where an activity should begin, how much instruction or conditioning was needed, or of what might be expected for the child's condition or stage of development. It should be pointed out, of course that this was not always the case and that some appropriate activities were observed, both during the regular assessments and the monitoring. This was especially likely to be true if the activity was concretely described on the performance card and suggests that the cards are indeed important items in the work with handicapped infants if not with all levels of instruction.

*Two Year Comparisons - Performance Cards*

*Performance cards were unknown when the caregivers began the 1977-1978 year. It is natural, then, that substantial instruction in all phases of them would be required and that they would take considerable time to internalize the skills needed to prepare them correctly and keep them up properly. During 1977-1978, after the early stages, the cards were quite appropriate, including the objectives, the criteria, and the activities. Some repetition of instruction was needed for the returning instructors in 1978-1979 and for the new instructor added. The cards increased in accuracy and adequacy very quickly in the year. A tendency to write*

*very limited objectives and use very small criteria developed and remained during the year. One caregiver, in 1978-1979, conducted some inappropriate activities.*

*As a general statement, the preparation of the performance cards was better done in 1978-1979 than in 1977-1978. The objectives were more often stated in quantifiable terms and the verbs used could nearly always be measured. Few double or incomplete objectives or criteria were evidenced. Further, for two of the caregivers, there was a definite improvement in the quality of the activities conducted. The instruction was more directly toward the work that was to be accomplished. In most cases, the evaluator found the cards and the progress of the children to be closely related.*

APPENDIX IV: STAFF CAREGIVER INFORMATION

## Staff Caregiver Behavior

As previously noted, the staff consisted of the director, three full time professional instructors, two full time paraprofessionals, and a number of part time specialists in the several fields need to perform the tasks of the program, plus two social workers. Only the director, professionals, and the paraprofessionals served the children directly as caregivers. The professionals and the paraprofessionals were the staff measured in the present assessment reports.

### Language Facilitation

The first item for consideration is that one of the paraprofessionals was hired quite late in the fall and had just begun work when the first assessments were made. Although she had had some instruction about the work, it was still very new. Her assessments, then, were low on most items, partially due to the small amount of experience, partly due to nervousness, and also because she was being used by an instructor to "fetch and carry" rather than a caregiver. The situation was mostly remedied later and the interim measurement showed the new paraprofessional to demonstrate about the same incidence on these items as did the other caregivers.

One paraprofessional was also new to the program; her tallies, likewise, were low in the language facilitation items. These, too, had improved by the time of the interim assessment.

The professionals and the paraprofessional that had been in the program the year prior to this, all began and a high level of language facilitation. This was especially evident in elicits vocalization, praises/encourages, gives info/rules, and talks in conversational tone. The tallies were near the maximum and remained high throughout the year. The paraprofessional, particularly, had very high incidence of deliberate language facilitation throughout every observation made during the year. In all three, too, offers help/solicitousness, inquires/requests, and labels sensory experiences were moderate, as would be expected. Converses successfully was limited, of course, by the capabilities of the students, and were usually low to moderate. Talks with signs began low since none of the students had yet learned the signs; this item moved to moderate by midyear and remained at about that level. Talks without signs decreased somewhat through the year, although signing never reached the level it had the year before, probably because no child was totally deaf and was at an age when talking should have been begun.

*Two Year Comparison - Language Facilitation*

*The caregivers, in 1978-1979, began very unevenly, with some at unusually low incidence and others, especially one paraprofessional, at or near maximum in all the language items. Although the tallies became more uniform during the year, and by the interim assessment were similar among all five, there was a quality during the year that did not improve. Primarily, this should be described as a "detached artificiality," giving an impression of carrying out the tasks but with other things foremost in mind. It was much more evident for the three professionals but it also occurred with the two paraprofessionals. The detachment was felt by the children and resulted in less than optimal participation in the teaching/learning exercises. Nevertheless, the tallies did not suffer from this occurrence and the post assessment showed a nearly perfect set of language facilitation means. The means were higher than for 1977-1978, but only slightly so, in nearly every item.*

Pre and Post Comparisons of Professional and Paraprofessional Caregiver Language Facilitation Behavior by Individual and Group Means per Observation Period

| Behavior | Caregiver 1 | | | Caregiver 2 | | | Caregiver 3 | | | Caregiver 4 | | | Caregiver 5 | | | All Caregivers | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif |
| 1. Elicits vocalization* | 0 | 3.7 | 2.7 | 3.0 | 3.7 | .7 | 1.5 | 2.5 | 1.0 | 1.3 | 2.3 | 1.0 | 2.0 | 3.1 | 1.1 | 1.6 | 3.1 | 1.5 |
| 2. Converses successfully* | 0 | 2.1 | 2.1 | 3.8 | 4.2 | .4 | .3 | 2.8 | 2.5 | 1.6 | 3.3 | 1.7 | 3.1 | 3.4 | .3 | 1.8 | 3.1 | 1.3 |
| 3. Praises/encourages | .3 | 3.1 | 2.8 | 4.8 | 4.9 | .1 | 2.0 | 3.7 | 1.7 | 3.3 | 3.3 | 0 | 3.6 | 4.6 | 1.0 | 3.3 | 3.9 | .6 |
| 4. Offers help/ solicitous | 1.4 | 4.0 | 2.6 | 4.8 | 5.0 | .2 | 1.6 | 2.7 | 1.1 | 2.8 | 3.4 | .6 | 3.4 | 3.8 | .4 | 2.7 | 4.0 | 1.3 |
| 5. Inquires/ requests | 1.8 | 3.8 | 2.0 | 3.0 | 3.4 | .4 | 2.1 | 2.8 | .7 | 2.3 | 2.3 | 0 | 3.3 | 3.1 | -.2 | 2.5 | 3.1 | .6 |
| 6. Gives info/ rules | 0 | 2.2 | 2.2 | 2.1 | 2.7 | .6 | 1.0 | 1.1 | .1 | 2.1 | 2.0 | -.1 | 2.1 | 2.1 | 0 | 1.5 | 2.0 | .5 |
| 7. Labels experiences | 0 | 1.3 | 1.3 | 1.7 | 1.9 | .2 | 1.8 | 1.3 | -.5 | 1.6 | 1.2 | -.4 | 1.8 | 1.9 | .1 | 1.4 | 1.7 | .3 |
| 8. Reads/shows pictures | ± | ± | ± | ± | .4 | ± | ± | ± | ± | ± | .3 | ± | ± | ± | ± | ± | ± | ± |
| 9. Sings to/ plays music | ± | ± | ± | ± | ± | ± | ± | .4 | ± | ± | ± | ± | ± | ± | ± | ± | ± | ± |
| 10. Conversational tone talk | .3 | 3.1 | 2.8 | 5.0 | 5.0 | 0 | 1.3 | 1.4 | .1 | 2.6 | 2.7 | .1 | 3.8 | 4.0 | .2 | 2.6 | 3.2 | .6 |
| 11. Talks with signs* | ± | 0 | ± | 1.7 | 2.1 | .4 | 1.7 | 1.7 | 0 | 1.8 | 1.9 | .1 | 2.2 | 2.4 | .2 | 1.7 | 1.8 | .1 |
| 12. Talks without signs** | ± | 1.1 | ± | .8 | 1.1 | .3 | .8 | 1.2 | .4 | 1.2 | 1.2 | 0 | 1.4 | 1.3 | -.1 | 1.1 | 1.3 | .2 |

*Limited by characteristics of the child. Zero indicates behavior should have been evidenced but was not; ± indicates the behavior was not expected.

**Applicable only when caregiver should have signed, thus the mean indicates a negative behavior; minus values note positive behavior on this factor only.

NOTE: Only negative values are indicated; unsigned numbers indicate a positive value.

Social/Emotional Behaviors

Two separate areas of discussion need to be presented in this section: those behaviors manifested during the actual assessments, and those behaviors observed during the general monitoring. Each is important, both from the positive and the negative aspects.

Negative behaviors observed during the assessments were extremely rare. Inevitably, a child or two would need some restraint, a "no" response, or some other type of behavior molding. As seen from the data in the first section of the table on the following page, the incidences of negative behavior were always less than one per two-minute session. These means are those that would be expected from professional caregivers.

Negative behaviors during other monitoring sessions, however, can be described as increasing across the academic year. One of the main observations would be that two of the caregivers decided to apply B-Mod methods to some of the children and to two particularly. In both cases there was certainly some justification for the application. One of the caregivers was quite explicit with the instructions given to the child, *if you do that you will be sent to your crib.* The instruction was repeated if it became necessary to isolate the child. Frequent checks were made to determine if the child were now ready to leave the crib and return to the instruction and she was taken out of the crib as soon as possible. Although the child's behavior in the context for which she was being isolated improved little across time, the isolation did have an effect concerning the immediate task to be carried out. One aspect that was unfortunate for isolating the child in the crib was that the crib was also used for other purposes. By the last month of the year, any child placed in the crib became tense, apparently having internalized that the crib was primarily for "punishment."

The second type of negative behavior that was observed three separate times was the insistence on continuing some activity, usually with very small infants, beyond the concentration or fatigue limits of the child. While it must be emphasized that this was done by only one caregiver, the result was clearly a disruption of the child's emotional state and interfering with the task to be done. Indeed, on one occasion, assessment was being attempted when it should not. This persistence in a task was seen as "necessary" for the child by the caregiver and a part of B-Mod. The evaluator doubts the use of this tactic in this context.

The explanations of these behaviors should in no way, however, detract from the almost absence of negative social and emotional behaviors by one of the professionals and the two paraprofessionals. They had a rapport with each child, understood the children's limits, and comprehended how to get the children to work at the tasks that were set for them.

The positive social and emotional behaviors were the norm for most of the caring for and instruction of the children in the program. Smiles, loving tones, loving contact, social games, and eye contact were incorporated so thoroughly into the teaching process that they literally could not all be counted during an assessment period. One of the paraprofessionals has this behavior so integrated into her work with the children that it is a model for any to follow. Of all the five behaviors, only one was reduced in any caregiver during the year, loving contact, and that was due primarily to the different kinds of activities that were being carried out, reducing the necessity or even the desirability to have that much physical contact.

Pre and Post Comparison of Professional and Paraprofessional Caregiver Social/Emotional Behaviors by Individual and Group Means per Observation Period

| Behavior | Caregiver 1 | | | Caregiver 2 | | | Caregiver 3 | | | Caregiver 4 | | | Caregiver 5 | | | All Caregivers | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif |
| *Negative* | | | | | | | | | | | | | | | | | | |
| 1. Criticizes/scolds | 0 | 0 | 0 | 0 | 0 | 0 | .3 | .3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .1 | .1 |
| 2. Negative mands | .1 | .1 | 0 | .1 | .1 | 0 | .3 | .3 | 0 | .3 | .4 | .1 | 0 | 0 | 0 | .1 | .2 | .1 |
| 3. Frowns/restrains | .1 | .3 | .2 | .3 | .3 | 0 | .7 | 1.1 | .4 | .1 | .1 | 0 | .3 | .7 | .4 | .3 | .5 | .2 |
| 4. Punishes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Isolates/B-Mod | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. Ignores | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .7 | .7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .1 | .1 |
| *Positive* | | | | | | | | | | | | | | | | | | |
| 1. Smiles at child | 1.0 | 4.0 | 3.0 | 5.0 | 5.0 | 0 | 1.3 | 2.3 | 1.0 | 2.3 | 3.0 | .7 | 3.0 | 3.7 | .7 | 2.6 | 3.6 | 1.0 |
| 2. Loving tones | 2.1 | 3.1 | 1.0 | 5.0 | 5.0 | 0 | .7 | 1.9 | 1.2 | 2.0 | 2.7 | .7 | 3.0 | 3.3 | .3 | 2.6 | 3.0 | .4 |
| 3. Loving contact | .8 | 1.6 | .8 | 1.4 | 1.7 | .3 | .3 | .7 | .4 | 2.3 | 2.0 | -.3 | 2.1 | 2.1 | 0 | 1.4 | 1.6 | .2 |
| 4. Social games | 0 | .4 | .4 | .8 | .7 | -.1 | .3 | .3 | 0 | .7 | .8 | .1 | .8 | .8 | 0 | .4 | .6 | .2 |
| 5. Eye contact | 1.3 | 2.4 | 1.1 | 4.3 | 4.7 | .3 | 1.2 | 1.8 | .6 | 3.0 | 3.3 | .3 | 3.0 | 2.6 | -.4 | 2.6 | 3.0 | .4 |

NOTE: Only negative values are signed; unsigned numbers indicate a positive value, that is, a positive number; the *negative* behavior values should be low to non-existent.

*Two Year Comparison - Social/Emotional Behaviors*

*The frequencies of the positive behaviors were higher in 1978-1979 than in 1977-1978. The increases were notable in smiles at child and uses loving/reassuring tones. A part of the increase was due to changes in personnel; a part was due to increased emphasis for the need for these behaviors with the personnel.*

*Two negative behaviors increased the second year over the first. No prolonged B-Mod was observed during 1977-1978; several direct and lengthy sessions were seen during the 1978-1979 monitoring. Further, another increase was found in the "persistence" with tasks beyond what appeared to be the concentration or fatigue limits of the child. Otherwise, the means for the negative behaviors were low for the assessments during both years.*

Piagetian Behaviors

Both the professional and paraprofessional caregivers tended to emphasize the three expected Piagetian behaviors more than the others at the beginning of the year, despite the fact that three of the five caregivers had been in the program the year before. A part of this "returning" to the most basic of the Piagetian behaviors is that the new children had not yet learned the expected responses and these behaviors appeared to be useful in establishing rapport and routine. The three most utilized by most caregivers at that time were, of course, imitation, small muscle skill activities, and the introduction of new schemes. Naturally, when children and caregivers are unaccustomed to each other, these are more in evidence than later. And that was the case - most of the other Piagetian behaviors increased, imitation and new schemes decreased, small muscle activities remained in about the same frequency throughout the year.

New schemes are particularly subject to the level of instruction and to the degree of confidence between children and teachers. More new schemes were needed in the early stages of establishing rapport, discipline, and attention to more useful tasks. That is to say, they are important at the beginning of a teaching/learning relationship but rapidly decline in necessity, or should, thereafter if the caregiver is successful in gaining the children's confidence. Note caregiver 1's changes in frequency (this also occurred last year with one of the caregivers but not the same one) in the table on the following page - a substantial difference. And, in fact, all the caregivers' frequencies declined from the pre to the post measurement.

Object permanence increased substantially across the eight months. The increases were observed at the interim assessment (not reported herein) and the frequency remained at about that level through the last half of the year, a level that would seem appropriate for this activity. No large differences were noted among the five caregivers.

Space orientation also tended to increase most during the first half of the year. It remained at a level that would appear appropriate for the activity from that point on. Again, no huge differences were observable among the five caregivers.

Means and ends, an emphasized Piagetian behavior, is never expected to occur so frequently that it would have a high number in the data table. It is a more complicated activity and takes time to develop properly. The near absence at the beginning of the year for two caregivers, and their development to at least some inclusion, was an important advance. The other three caregivers kept an appropriate level most of the year.

Pre and Post Comparisons of Professional and Paraprofessional Caregiver Piagetian Behaviors by Individual and Group Means by Observation Period

| Behavior | Caregiver 1 | | | Caregiver 2 | | | Caregiver 3 | | | Caregiver 4 | | | Caregiver 5 | | | All Caregivers | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif |
| 1. Object permanence | .1 | 2.3 | 2.2 | 1.7 | 2.8 | 1.1 | .7 | 2.3 | 1.6 | 1.1 | 2.6 | 1.5 | 1.0 | 2.0 | 1.0 | 1.1 | 2.4 | 1.3 |
| 2. Means and ends | 0 | 1.0 | 1.0 | 1.3 | 1.4 | .1 | 0 | 1.2 | 1.2 | .7 | 1.1 | .4 | 1.1 | 1.3 | .2 | .6 | 2.0 | 1.4 |
| 3. Imitation | .7 | 1.2 | .5 | 3.2 | 2.4 | - .8 | 2.1 | 2.2 | .1 | 2.2 | 2.0 | - .2 | 2.3 | 2.0 | - .3 | 2.1 | 2.0 | - .1 |
| 4. Causality | 0 | .1 | .1 | 1.1 | 1.1 | 0 | .1 | .8 | .7 | 1.0 | 1.3 | .3 | .3 | .9 | .6 | .5 | .8 | .3 |
| 5. Small muscle skills* | .7 | 2.1 | 1.4 | 3.0 | 3.3 | .3 | 2.1 | 2.6 | .5 | 2.8 | 2.9 | .1 | 3.1 | 3.1 | 0 | 2.6 | 2.8 | .2 |
| 6. Spatial orientation | .8 | 1.3 | .5 | 2.2 | 2.7 | .5 | 1.7 | 3.0 | 1.3 | 3.1 | 3.1 | 0 | 2.2 | 3.1 | .9 | 2.0 | 2.6 | .6 |
| 7. New schema* | 1.8 | 2.0 | .2 | 2.1 | 1.3 | - .8 | 3.1 | 2.0 | -1.1 | 2.3 | 2.1 | - .2 | 2.0 | 1.8 | - .2 | 2.3 | 1.8 | - .5 |

*Not necessarily applicable in every instructional activity.

NOTE: Negative differences are indicated with the minus sign; all others are positive values.

Imitation reduced from the pre to the post assessment; this is entirely approoriate. Modeling continued in use, but in a very abbreviated manner, more toward indicating the behavior desired, like a sign, rather than a complete imitation. In such cases, the behavior was treated as means and ends, causality, object permanence, or one of the language facilitation behaviors. Only one caregiver maintained a moderate level of imitation, scarcely modifying her behavior from the early stages.

Causality is also a behavior that occupies time to set up and carry to fruition. It would be unusual, then, to encounter a mean frequency above one per observation period. Three caregivers demonstrated use of causality very directly and with the follow through expected for the behavior. Their frequency means were about what would be expected for the age of the children. Two caregivers remained low on this item, rarely developing the technique within either the instruction measured during the assessment or during the general monitoring of classroom instruction.

Prehension and small muscle skills were high at the beginning of the year and continued so during the year, slightly increasing toward the end of the period in complexity and results. While these latter do not show in the data table itself, the improved learning by the infants was evident.

Spatial role and orientation was well developed in most of the caregivers at the early assessment and remained so. The utilization of objects, moving them to another plane or out of sight, moving the child to a different area, and other similar applications of the techniques were carried out well. It is one of the areas in which most of the children appeared to advance rapidly.

New schema are very important at the beginning of the year and become less so later on when confidence has been established and when the child understands what is expected while in the different learning centers. Some use of new activities continues to be useful to avoid fatigue and increase interest. The levels used by the caregivers was moderate throughout the year and very much as would be needed.

*Two Year Comparisons - Piagetian Behaviors*

*A comparison of the caregivers as a group, in 1977-1978 and 1978-1979, show about the same beginning and the same approximate frequencies at the end of the year. It needs to be pointed out that the two groups were not the same. One paraprofessional position was vacated during the first year and filled. It was again vacated and filled again for all of 1978-1979. One professional position was vacated and filled between years. Had it not been for these changes, it is likely that the All Caregivers mean frequencies would have been higher. The Piagetian behaviors are not simple and require a great deal of practice before they are internalized.*

*Object permanence was about the same across the two years: it remained moderate. Means and ends had increased substantially at the end of 1977-1978 but almost had to begin again for two of the caregivers in 1978-1979; it did not recover to the same level as the previous year. This was also true for causality. Prehension/small muscle skills, imitation, spatial role/orientation, and new schemas were almost exactly the same for the group mean in both years. In general, the Piagetian behaviors were at about the level desired by the last portion of each of the two years but low at the beginning of each.*

Other Behaviors

Five other areas of caregiving are included in the instrument: physical development, "does nothing," daily living tasks, child monitoring, and non-child directed tasks. While each of these is important, they were rarely utilized as the basis for the instructional measurement. For that reason, comparisons through data examination yield little of value in describing the program. Their monitoring during the regular daily activities, however, were recorded narratively and are so presented in this final report.

Physical development, although a primary responsibility of the physical therapist, was also expected, in some measure as followup and general development, from all five caregivers. The physical therapist conducted few direct activities in this caregiving area and those that were observed tended to be either minor development tasks or demonstrations for a paraprofessional. Vestibular-kinesis stimulation activities were observed early in the year with one child and these were carried out by both the physical therapist and by a paraprofessional. During the last half of the year some stimulus tasks were seen but they tended to be mostly as a subtask of another activity. The other three caregivers were not observed to conduct a stimulus activity. Large muscle play was provided nearly every child nearly every observation. These included both quite structured activities and some informal ones either in conjunction with music, on the playground, or in the play time within the classroom area. All five caregivers participated about equally in this part of the work. Technical physcial therapy was conducted by the physical therapist and by the two paraprofessionals. These activities were observed much more frequently during the first half of the year than the last half. Mosthers of the children were also instructed in these activities and they performed some of these tasks themselves.

"Does nothing" should not appear, either in the formal assessments or in the regular monitoring. Four of the caregivers were never observed, formally or informally, to "do nothing." One professional, however, was frequently seen as doing nothing by the evaluator. On one occasion, the evaluator questioned what the professional was doing and she remarked, "observing." This did not appear to the evaluator as a valid activity for the number of times it was observed or for the length of time it occurred.

Daily living tasks were noted every observation day, as would be expected. Four of the caregivers carried out myriad tasks of feeding, toileting, dressing/undressing, washing or instructing children in washing. Much of the self help development was conducted during these tasks and generally the four caregivers devoted themselves directly to teaching self help skills. There tended to be some lessening of the activities attributable to self help toward the end of the year and this would be expected except that the growth in self help skills, as reported elsewhere, was lower than had been predicted. One professional caregiver was never seen to directly participate in the feeding or toileting activities.

Child monitoring was, of course, an almost constant activity of all the caregivers. Physical shepherding was often necessary and was carried out in an appropriate manner on almost all occasions. Eye checks were frequent and seldom did any child do anything without being monitored. The only exceptions were momentary, that is, a child might occasionally begin some untoward activity but the caregivers always perceived the activity and curtailed or diverted it.

Non-child directed tasks were also observed frequently; they occupied a large amount of every caregiver's time each day. Generally the tidying and preparation was done by the paraprofessionals but one of the caregivers was also observed to carry out most of the activities that pertained to the children under her care. Works with other staff was a nearly constant activity since many of the activities were designed to be conducted by the group as a whole. In addition, the paraprofessionals often did helping tasks, as well as carrying out some activities on their own. During the first part of the year one paraprofessional was always used in a helping capacity but by midyear she was being assigned some instructional duties. While the level of her work was never at the same capacity as the other paraprofessional, she did advance considerably and was allowed to do a great deal of the instructional work by the end of the year.

Work with parents was an important goal of the project. Parents were always in evidence, that is, at least some parents were present during every observation and monitoring period. Some instruction was given them and demonstrations of instructional and developmental work they could continue in the home was observed. The level of this kind of instruction varied a great deal, from highly complex schemes to bare suggestions. The amount of work with the parents decreased during the last half of the year. A part of this decrease was an estrangement of the parents from some of the staff (see the parental interview section for their reactions). It did not appear to the evaluator or the parents that the level or tone of the instruction with parents was satisfactory, particularly in the case of two of the caregivers.

Record keeping was frequently observed. This included keeping up the performance cards, making notations for the narrative descriptions of the work with each child, and the assessments of child progress. The record keeping was observed to interfere with the instruction of the child or children only one time; the pressure to complete the assessments caused one caregiver to continue an attempt at measurement beyond the capacity of the child to cooperate. In all other cases, however, the record keeping was done during moments when the caregiver was not needed in a particular activity, or before or after the children were there for instruction.

*Two Year Comparisons - Other Behaviors*

*As a generality, all of these other behaviors were in approximately the same proportion in both time utilization and quality in both 1977-1978 and 1978-1979. A part of this, of course, is that the activities have to be carried out every day: the children have to be fed, toileted, shepherded: the records have to be kept; joint work must occur among the staff and between the staff and the parents. Two variations need to be mentioned, however. One, in 1977-1978, all the caregivers shared nearly equally in the daily living, child monitoring, and non-child directed tasks; in 1978-1979, one caregiver participated very little in any of these except record keeping. The second variation was in the amount of physical therapy work that was conducted; the amount was considerably greater in 1977-1978 than in 1978-1979. While the evaluator is not a physical therapist, it appeared from the conditions of the children and from the performance task cards prepared by the caregivers, that the amount of technical therapy needed was about the same in both years.*

*With the exception noted, one of the strengths of the project in both years was the high intensity of the work by the caregivers, by the quality of that work, and by the apparent results obtained. While each caregiver was responsible for particular children and developmental tasks, they also aided each other in the general caregiving needed to make the program successful.*

## Summary of Behaviors

Two groups of caregivers were observed through general monitoring and through the formal assessment instrument: the teens participating in the project as students and the professional and paraprofessionals hired to conduct the work. Formal assessments were conducted at the beginning of the year, in January, and in May; additionally, supplemental assessments were conducted to aid in the development of a caregiver through the conferences designed to increase productivity.

The language facilitation activities, highly important with this group of children, generally began at a rather low level at the beginning of the year and increased during the eight months between the pre and post assessments. One paraprofessional was a notable exception: her language facilitation work was nearly perfect from the beginning to the end. Further, one professional displayed a high degree of ability in the language facilitation work throughout the year. One teen, although beginning at an elementary level, developed so rapidly that by the end of the year, her positive language facilitation frequencies were the second highest of all the group.

The social/emotional behaviors tended to be much like those that would be expected. Very few negative behaviors were noted and generally these were those that were needed to teach the children and to monitor them during the time they were in the instructional area. B-mod activities were evidenced by two caregivers during the last months of the project, a new addition to the repertoire: this consisisted almost entirely of isolating the child and it was generally conducted appropriately except that the isolation site was used for other functions also, possibly causing some confusion among the children. Further, some pressuring of children beyond their emotional or physical capabilities for that point in time also appeared. Generally, however, the caregivers were very appropriate in their utilization of social/emotional techniques and in their own social/emotional behavior when directly working with children.

The Piagetian tasks developed rapidly during the year and were carried out at a moderate level, which is expected. One professional, one paraprofessional, and one teen demonstrated a very high level of sophistication in carrying out the Piagetian tasks and are to be commended for their unusual abilities.

The other behaviors were generally as would be hoped for in a project with handicapped children. There was some reduction in the physical therapy activities, as previously mentioned, and there was one caregiver that was observed to "do nothing" at various times during the year. Further, that same caregiver did not help with the daily living tasks very often, especially those involving feeding and toileting. In general, however, the other behaviors were soundly and accurately done.

*Two Year Comparison - All Behaviors*

*An examination of the data for all behaviors and for all caregivers across the two years shows them to be very similar. That is, as two groups of caregivers, the tasks were well conducted. Only two activities showed a decrease across the two years: physical therapy and self help. The reduced physical theraphy was evident throughout the second year: the decreased self help occurred only during the last three months of the second year. One new activity appeared in 1978-1979 - B-Mod in the last few months. It was generally appropriate except for the difficulty of using the isolation site for other purposes. Toward the end of 1978-1979, also,*

*pressuring children to continue tasks beyond what they would - or probably even could - do was evidenced twice, once to an unusual extreme.*

*Nevertheless, it must be emphasized that the OVERALL behaviors of the caregivers during the two years, in respect to the instructional tasks they were performing, were very much alike. While the quality of the instruction was more uniform the first year, 1977-1978, the unusual growth evidenced by one professional and one paraprofessional the second year very likely offset the problems that developed during 1978-1979. An added dimension, too, was the tremendous growth of one of the 1978-1979 teens, whose work was on a par with the other caregivers by the last half of the year.*

# APPENDIX VI: JOB DESCRIPTIONS

## JOB DESCRIPTIONS

### Project Director

The Project Director is responsible for both administrative and instructional components of the Project. It is the Director's responsibility to ensure that all program objectives are met and that day-to-day functioning proceeds smoothly.

Specific Tasks:

(1). Supervision of all program functions
(2). Supervision and coordiantion of staff activities
(3). Completion of all required reports
(4). Coordination of Project activities with Plan A and with campus activities
(5). Interface with central administrative staff
(6). Interface with coordination with community and external agencies
(7). All other tasks except as otherwise designated

### Organizational Heirarchy

The Director functions under the supervision of Ms. Margaret Casillas, Ass't Superintendent for Elementary Education. As part of Special Education, the Director also functions within Plan A as much as possible.

### Teacher/Physical Therapist

This teacher/therapist is responsible for a minimum of 10 level I students and for the Motor Development portion of Level II & III student's curriculum. All classroom physical therapy is coordinated through her.

Specific Tasks:

(1). Assistance with Intake as necessary
(2). Completion of all student procedures
(3). Assessing performance and developing appropriate Individual Assessment Plan
(4). Quality-control of all instruction
(5). Parent contact related to child's program
(6). Administrative duties (lunch count, teacher log, etc.) as assigned
(7). Completion of daily data gathering
(8). Supervision and direction of teacher assistants, parents and volunteers
(9). Coordination of supportive classroom personnel

### Organizational Heirarchy

The teacher/therapist functions under the supervision and direction of the Project Director.

Teacher/Speech Therapist

This teacher/therapist is responsible for a minimum of 10 Level II/III students and for the Language Development portion of Level I student's curriculum.

Specific Tasks:

(SAME AS FOR TEACHER/PHYSICAL THEAPIST)

Organizational Heirarchy

(SAME AS FOR TEACHER/PHYSICAL THERAPIST)

Teacher/Teen Coordinator

This teacher is responsible for a minimum of 5 level II students and for implementation of the Teen Component program.

Specific Tasks:

(1). Development of Teen Training Modules
(2). Supervision of Teens at all times
(3). Training of Teens (administration of Modules plus classroom observation and practicum)
(4). Coordination with Teen's High School staff as necessary

Organizational Heirarchy

(SAME AS FOR OTHER TWO TEACHERS)

Teacher Assistants

Teacher Assistant(s) are responsible for completion of assigned tasks. They may assist with instruction only under supervision and with written lesson plans (Program Monitoring Cards, side 1).

Specific Tasks:

(1). Assistance with data gathering on students worked with
(2). Daily housekeeping as assigned
(3). Other tasks as assigned

Organizational Heirarchy

Teacher Assistants function under the supervision of their respective teachers.

Home Liason

The home liason functions as an assistant to the Social Worker and is responsible for the completion of tasks assigned by the Social Worker or the Project Director.

Specific Tasks:

(1). Completion of initial screening and intake information
(2). Assistance with parent involvement activities
(3). Assistance with referrals to other agencies

Organizational Heirarchy

The Home Liason functions under the supervision of the Social Worker and the direction of the Project Director.

Social Worker

The social worker is responsible for working with the family to ensure optimum support of child's developmental needs.

Specific Tasks:

(1). Complete Social Assessment on each family
(2). Assist parents in child-related activities (obtaining medicals, applying for SSI, etc.)
(3). Organize "Mother's Group"
(4). Coordinate all parent involvement activities
(5). Coordinate referrals to and from C.I.I.P.

Organizational Heirarchy

The Social Worker works as a team with the teaching staff and is directly responsible to the Project Director.

APPENDIX VII: TEEN ACHIEVEMENT

## TEEN ACHIEVEMENT

Pre and post tests, with the post a modification of the questions over the same material as in the pre test, were performed on each of the units taught within this academic year. When the scores were too low on the first administration of the post test, additional instruction was given and another post test was administered; these second post test scores were not utilized in this comparison).

The following table gives the total possible points on each unit test, the pre and post scores for the group and the percentage of correct responses in the post test when compared to the total possible points. The percentage correct has been rounded for reporting purposes.

Possible Unit Scores, Pre and Post Mean Scores, and Percentages of Correct Post Scores to Possible Scores

| Unit | Possible Score | Mean Pre Score | Mean Post Score | Post Percentage of Total |
|---|---|---|---|---|
| Special Education | 27 | 15.3 | 21.3 | 79 |
| Special Child | 9 | 1.7 | 5.0 | 55 |
| Families and Parenting | 10 | 3.7 | 5.0 | 50 |
| Infant Curriculum | 42 | 16.0 | 32.1 | 76 |
| Birth Process | 35 | 5.7 | 33.0 | 94 |
| Motor Development | 13 | 3.0 | 9.0 | 69 |
| Pre-speech and Language | 20 | 5.0 | 17.3 | 87 |
| Perception/Cognition | 20 | 6.3 | 14.0 | 70 |
| Social/Emotional Development | 9 | 3.0 | 9.0 | 100 |
| Curriculum in Action | 27 | 0 | 21.0 | 78 |
| Behavioral Objectives | 26 | 2.7 | 22.7 | 87 |
| Teaching Techniques | 34 | 4.1 | 32.6 | 96 |

The gains in the pre to post test scores were large. Although not presented in this comparison, all but two exceeded fifty percent. As would be expected, the more technical the material, the greater the gain between the pre and post means. The instruction certainly had an effect on the learning.

Generally, the percentages of correct answers on the post test were about the same for the 1978 and 1979 groups, despite some modification of the teaching modules and the emphases on certain portions of the materials. While it had been expected that some general rises would occur, they were minor. The teens for the two years performed about alike.

The teen achievement on the instructional modules was generally satisfactory both years. The 1979 group was lower than expected on the special child and the parenting modules; 50 to 55% is not an acceptable level. No reasons for these low achievement scores could be ascertained.

## OTHER TEEN LEARNING FACTORS

Monitoring via the Modified Observation Schedule and Record and interviews with the members of the group generally confirmed their perceptions of the classroom environment. The Modified Observation Schedule and Record, an adaption of the Medley & Mitzel Observation Schedule and Record 2, prepared by Adolfo Munoz III, was selected to supplement the other instruments included in the external evaluation. Standardized on innumerable sessions in Edgewood and in other Texas school districts, the measurement can specify teacher interpersonal style, classroom emotional climate, and elements from the Dimensions of Schooling Questionnaire of the Ontario, Canada, Institute of Education.

Teacher interpersonal style in the CIIP teen program could best be characterized as low key with persistent reiteration of the materials, particularly those related to the affective portion of dealing with handicapped children. The teacher used a modulated but low voice, entirely satisfactory for the small group she was addressing. This gave an intimate character to the teaching.

Similarly, since there were only a few students, their own questions and interactions were handled almost immediately, and again, these were dealt with on a fairly personal basis. No negative teacher or student responses were observed. The general teacher interpersonal style score was +2 on every item but one each, which varied among the observations. The scores indicated a positive teacher interpersonal style.

Emotional climate was quite positive with attention to individual needs and mutually positive interaction. No negative item responses were tallied. Some were "hesitantly neutral," a category often associated with nervousness. In general, the tenor of the emotional climate was positive.

The teaching materials were very directly related to the class and to the work the teens were to do. This factor, combined with the very small number of students, made scoring the Dimensions of Schooling difficult. Too, during any one set of observations, the materials were always very specific to the topic, a favorable factor but a condition that makes judgment about the entire set tenuous. It would appear, however, that the materials were those that the students felt were applicable and that they had equal access to them.

Visual aids were utilized and one was observed in use. It was very specific and exactly attuned to the topic being studied. Others were reported in use and the teens felt that these were also excellent although sometimes difficult.

The learning climate, as measured by the Modified Observation Schedule and Record, was positive and appeared similar to that reported in the teen perceptions. In 1979 as in 1978, there was some feeling by the evaluator that the classes were somewhat more informal that the technicality of the materials would indicate as needed. Nevertheless, the students did not perceive the classes as too loosely managed, thus the techniques employed by the teacher would have to be interpreted as appropriate.

The achievement of the teens was generally high. That factor, combined with the emotional climate and interpersonal style measured in these observations, and the teen perceived environment reported in an earlier section, combine to add up to a positive learning environment. No negative factors were found.

APPENDIX VIII: TEEN CLASSROOM ENVIRONMENT

## TEEN PERCEIVED CLASSROOM ENVIRONMENT

1978 to 1979 analyses of the learning climate were conducted to supplement the data from the classroom monitoring. The *Learning Environment Inventory*, adopted for this purpose, was developed by Gary J. Anderson and Herbert Walberg and has undergone considerable standardization. Additionally, it has had extensive use in Texas evaluations and the scores from some of the Texas studies have been included for comparison purposes.

The instrument contains 105 items spaced alternately through the set so that the fifteen subtests are not grouped together. Each item is answered by indicating the degree of agreement or disagreement; some are stated positively and some negatively and near duplicate items are included for internal consistency checks. Items in the negative mode are reversed by a computer program established by Development Associates within the Statistical Package for the Social Sciences (version 7) at the Trinity University Computer Center. The instrument has no overall climate score.

The students marked the items in the presence of the evaluator and with the teacher absent from the class. The students were allowed to ask questions about the intent of the items but they were not permitted to discuss any item with their peers. The item responses were keypunched and the analyses run in conjunction with other scores available. The small number of students in the class prohibited absolute computation of significant differences but the results were so uniform that variations from scores found by the instrument authors and elsewhere in Texas, including the Edgewood Independent School District, could be ascertained.

There was little difference between the 1978 and the 1979 test scores; no significant differences could be ascertained. In both, the results showed that the teen program instructional climate was quite favorable and more so than in most studies conducted previously by the evaluator. The table on the following page contains the mean scores of the teen responses by subtestthose of comparable groups for the two years. Significantly different scores between those of the teen group, for either year, and those with the comparison groups are shown even though they must be held as somewhat tenuous because only five students are included in this analysis; that number places severe limitations on statistical comparisons.

### Cohesiveness

Cohesive classes sanction only goal directed behavior; if the group norm includes learning, cohesiveness contributes to increased learning. The separate monitoring of the class in 1979 demonstrated that the group was indeed learning oriented. For those groups in which the orientation is in opposition to learning, cohesiveness acts against those pupils who want to learn. This was not the case in this group in either 1978 or 1979.

Cohesiveness was high in both years that the program was monitored by this evaluator. It was considerably higher than the scores of the comparison groups and statistically significant. The difference between the groups in the two years was minimal and they were not statistically different. The feeling of cohesiveness should have aided the students in their learning program.

1978 and 1979 Learning Environment Inventory Subtest Means for the Teen Component, those Reported by the Instrument Authors, for those from other Texas Administrations

| Subtest | 1978 CIIP | 1979 CIIP | LEI Authors* | Other Texas |
|---|---|---|---|---|
| Cohesiveness | 22.7** | 22.5** | 17.7 | 18.0 |
| Diversity | 20.2 | 19.8 | 20.2 | 20.1 |
| Formality | 18.9 | 19.1 | 18.0 | 18.7 |
| Speed | 18.1 | 18.3 | 17.3 | 17.5 |
| Environment | 22.8** | 21.7** | 16.8 | 18.9 |
| Friction | 14.6** | 16.1 | 16.8 | 17.8 |
| Goal Direction | 18.8 | 19.2 | 18.0 | 18.7 |
| Favoritism | 14.1** | 15.6 | 14.2 | 16.1 |
| Difficulty | 18.1 | 18.4 | 18.7 | 18.1 |
| Apathy | 14.0** | 14.0** | 17.8 | 18.6 |
| Democracy | 17.8 | 18.0 | 17.5 | 17.2 |
| Cliqueness | 16.8** | 16.0** | 19.3 | 19.4 |
| Satisfaction | 22.0** | 22.8** | 16.8 | 16.8 |
| Disorganization | 15.8 | 15.1 | 16.4 | 16.5 |
| Competitiveness | 17.3 | 17.3 | 17.0 | 17.6 |

*Taken from the manual as reported for Canada and New England.

**Significantly and programmatically different from either the authors' reported scores and/or the other Texas scores.

Diversity

While the authors report this as a statistically weak construct in the instrument, it was intended to find out if the range of students' interests was being taken into account. The teens' scores varied somewhat more among individuals than did any of the other subtests but the mean was so nearly like that found by the authors and in the other Texas studies that it must be presumed that an "average" amount of diversity was fostered in this program.

Formality

This factor describes the amount of formal structure present and although it has usually not been associated with overall student learning, it does not appear to hinder learning when at either extreme. Very high formality is often found where there is too much preoccupation with quiet and orderliness; low when the lack of discipline is to the point of being a problem.

The CIIP teens were in nearly exact agreement on a "middle level" of formality in their instruction. Their scores were not different from those found by the authors nor from those in other well organized Texas classes. Apparently the

program provided sufficient structure for comfort and yet not so much that the students felt unduly hampered in their efforts to acquire the knowledge. Their perceptions would appear to be a favorable judgment about the amount of structure in the program.

Speed

The class rating of how fast the teacher covers the work in relationship to how well the pupils feel they are learning, was expected to be an important ingredient in climate and in this course. Speed and amount learned was found to be related to other climate factors from the studies by Anderson & Walberg.

The CIIP teen component rated speed in their classes at about the same as that of the authors' sample pupils and those found in other Texas administrations. It would appear that this factor was about what would be expected in a well organized class with a substantial amount of material to be covered. It was neither too low nor too high, according to the perceptions of this group.

Environment

This dimension is associated with the amount of learning and is affective in nature, although the physical aspects of the room (seating, materials, and equipment) contribute much to it. Innovation has been demonstrated to be reduced when environment is low. It should be noted that Texas youngsters generally have rated environment higher than do those used in norming the instrument. This dimension, along with satisfaction, is probably the nearest to an overall rating of the program that can be garnered from this instrument. Environment and satisfaction have been highly correlated in Texas studies and also highly correlated with achievement.

The teen mean was statistically significantly higher than the score reported by the instrument authors or found in the other Texas studies as a whole. It was similar to the means found for vocational classes in an Elgin, Texas, study, and to the remedial mathematics classes in an Edcouch-Elsa, Texas, study, both of which were highly motivational and which exhibited high satisfaction and high achievement.

The drop of the mean from 1978 to 1979 of 1.1 points was not significantly different at the .01 level, as postulated by the evaluator at the beginning of this study. It was significant at the .05 level. Satisfaction did not drop, however, thus conclusions on the change are not warranted except to report that interviews showed the group to be somewhat less comfortable late in the year than they were at the beginning.

Friction

The friction scale measures the major factors of disagreement, tension, and antagonism present in the class from the student viewpoint. Some friction seems to be needed, especially tension, if the rate of progress is to be satisfactory. Average friction is thus desirable in almost all classes. High friction classes, however, generally have too much antagonism or there is some element of "uncomfortableness" present. Very low friction classes are those in which the pressure to learn is too weak.

The 1978 teen groups showed an "average" amount of friction present. Their mean of about 15 out of a possible 28 was significantly lower than found by the authors and in most other Texas investigations. That mean did not hold in 1979. And again, although the difference between 1978 and 1979 did not meet the evaluator standard of .01, it did reach .05. That is to say, the means of 1978 and 1979 were different according to many investigators' standards. The 1979 mean was not different from those found by the authors or those found in other Texas investigations when taken as a whole. The general monitoring would appear to show an increase in tension, primarily relating to the interrelationships among the staff. As nearly as could be ascertained, it did not involve the teens directly but it apparently affected the way they perceived their work in the program.

Goal Direction

This factor has been found to be significantly related to achievement in the more traditional type classes but not in individualized instruction. It measures the group's perceptions of the class goals and agreement/disagreement with those goals.

The instrument mean was approximately 18 and it has varied a great deal in Texas classrooms, even though the mean for the Texas studies is not far above that. The individual scores of the teens in the program were not uniform. About the same number agreed with the items as those that disagreed. Some difference in perception of the goals was determined by the interviews. Since the orientation is occupational in nature, some of the difference apparently lay in the intentions of the students to pursue this type of work.

The 1978 mean was almost exactly like that of the instrument authors' studies and not significantly different from the mean of all the other Texas studies. An important change occurred between 1978 and 1979, with the rise in the latter year different at the .05 level of significance but not .01. That rise is on the favorable side, however, and should not be interpreted as potentially damaging to learning in the program.

Favoritism

While the relationships between this subtest and achievement have been low and inconsistent, it has been closely related to self concept and the general satisfaction scores. It is a negative measure. The instrument mean was just over 14 and the 1978 teen mean was exactly 14. The 1978 mean was significantly lower than that for the other Texas scores. The 1979 mean of 15.6 approached the mean of the other Texas studies and was not different statistically. The 1978 and 1979 means were different at the .05 level. Still, since the mean fell close to those of other studies in both years, and since general monitoring showed no clear favoritism among the staff and students, no conclusion is drawn about the difference.

Difficulty

Difficulty, although designed to measure another set of factors, has resulted in recent studies to be almost synonymous with challenge, thus a moderately high difficulty index, except for vocational/technical education, has been found to be closely related to achievement. Extremely high or low difficulty means are undesirable. The means for CIIP 1978, CIIP 1979, the authors, and other Texas were for all purposes alike, thus an "average" amount of difficulty would have

to be interpreted. That level should indicate a sufficient challenge to the students and thus would be a positive characteristic.

Apathy

This scale complements the cohesiveness scale and indicates the degree of affinity the students feel with the class activities. It appears to be negatively associated with learning; as posited, apathy is not conducive to achievement.

Apathy in the 1978 and 1979 teen program was significantly lower than the level found by the instrument authors and in the studies conducted in other programs in Texas. The difference was great, nearly three points, demonstrating a high level of interest by these students in the materials and in the other class work. The teen scores were a very positive environmental indication.

Democracy

This subtest has not given consistent results and the scores reported herein cannot be used as diagnostic except in the extremes. Even for these, nothing should be imputed unless a class shows a problem with this and other scales in combination.

The instrument norm was about 17.5. The 1978 and 1979 CIIP teen means were not significantly different from that. Nor were they different from the means from other Texas studies. A moderate amount of democracy appeared to be present in this program.

Cliqueness

Subgroups within a class can lead to hostility among the members and it can also provide ways to cover up failures. When a group is very learning oriented, it can serve to stimulate slower members of a particular clique. When cliqueness and favoritism coincide, the factor is definitely important. It generally is a negative factor when the mean is high.

The instrument and Texas norms were both over 19 while the teen component mean was less than 17 both years, indicating a perception of a low amount of cliqueness in the group. With so few members in the class, they could have constituted a clique. The scores and the general monitoring suggest, however, that this was not the case. Cliqueness should not have been an impediment to learning in the CIIP program either year.

Satisfaction

This subtest has generally been found to be the most closely correlated with achievement in the Texas studies, particularly when it is either quite high or quite low. While the satisfaction pupils feel with their classes is closely related to their feelings about learning, the measure must be viewed carefully, especially when the scores indicate dissatisfaction - that is, a very low score.

This was not a case in point with the teen group. No student answered a satisfaction item negatively. The students felt that they were learning at the rate they expected. The mean of 22.0 in 1978 and 22.8 in 1979 was substantially and

statistically higher than the instrument or the Texas norms and was a very powerful indication of student satisfaction with this program. This was notably so when this subtest score was considered in conjunction with the environment subtest mean since it, too, was very positive. It should also be pointed out that this level of satisfaction has only rarely been found in the Texas studies and in every case of this high mean, the classes were vocational or technical in nature. If the teen program is seen as vocational, then the satisfaction means were very much in keeping with those found in other Texas classes of this same orientation.

Disorganization

When a class is perceived as disorganized, students as a group, but not all the individuals, generally learn less. One exception is mathematics, which when high absenteeism is present, is usually judged "disorganized" even though the class mean in achievement is not low.

There was no compelling reason for this course to be viewed as is mathematics although the highly individualized practice resulting from the classroom work could be so interpreted. The 1978 and 1979 means demonstrated that the individual aspects to the work did not cause the members to view this differently; the items were marked nearly alike by all the participants.

It should be pointed out that vocational/technical classes have often been found to be more organized (with a low mean) than regular classes. In this case, the CIIP teen component mean did not follow the general trend of vocational education as it did in most other aspects. The presentation of the objectives, and the frequently made references to the "work" related materials, present in most vocational classes, apparently did not occur or were not perceived as such with these groups.

Competitiveness

Competitiveness, the last subtest in this learning environment instrument, is a group dynamic characteristic which is derived from the teacher and from the composition of the class. Achievement has been "loosely" associated with this factor in other administrations of this test, in that those with middle scores appear to achieve better than those at the lower end of the scale - but they achieve at the same rate as those at the upper end. A high incidence of "ultra" competitiveness, however, has been found in rooms with undesirable scores in some of the other subtests.

The means for the 1978 and 1979 teen components were in the middle range and at about the same level as that found by the instrument authors and in other Texas studies. An interesting finding on this factor is that it is generally the only one on which Mexican American students score diffently from other ethnic groups in Texas - Mexican Americans have almost always scored higher than the other ethnic groups. That this present group, all Mexican Americans, did not score higher than the usual mean, is therefore notable. It is likely, however, that the small number of class members and their high cohesiveness, figured importantly in their mode of answering. In any event, the middle range of competitiveness for the teen group, in both years, indicated a highly satisfactory level for this subtest.

Environment Summary

The learning environment inventory scores for the 1978 and 1979 CIIP teen component classes were generally quite positive. No negative factor was found. On most of the subtests, the means of the teen scores were almost exactly those found in the instrument norming administrations and in those performed in other Texas studies or they were even higher than those found elsewhere.

The means were significantly more favorable than other schools on seven factors in 1978 and five in 1979. The differences in 1978 were cohesiveness, environment, friction, favoritism, apathy, cliqueness, and satisfaction. In 1979 they were not different on friction and favoritism. In both cases, however, the mean scores of the CIIP component were very favorable and indicated that the environment should not have interfered with learning.

The means for 1978 and 1979 were not different from each other at the .01 level. Some were different at the .05 level: friction, favoritism. In both cases, the 1979 mean was higher than that for 1978. Too, in both cases, the change was toward the negative mode. However, even though the direction of the change was toward the negative mode, it did not reach a level postulated to be damaging to their learning. In other words, it should be stated that the friction and favoritism scores were more positive than the 1979 scores.

Reiterating, the Learning Environment Inventory 1978 and 1979 means for the CIIP teen component classes were nearly alike. In all cases, the scores were at the expected levels for well organized, well taught vocational programs except one. In most of the subtests, the teen component scores exceeded the expectations of regular classes, whether those studied by the instrument authors or those investigated in Texas.

It should also be noted that the means were higher than for senior classes researched in this same high school previously. While the careful selection obviously would be a factor on some of the items, the classes could have been seen in the same light had they not been different. Thus, the learning environment in the CIIP teen component classes did not constitute a negative factor in regard to student learning - on the contrary, it was substantially positive.

APPENDIX IX: TEEN CAREGIVER BEHAVIOR

## CAREGIVER BEHAVIOR

The essence of the work with handicapped infants is the knowledge, skill, and their application in the caring for and instructing of the clients. The Edgewood Comprehensive Infant Intervention Project placed special emphasis on the training of the caregivers, on the preparation of the learning tasks to be accomplished with the infants, and on the record keeping function to further the infants' development.

In addition to the director and several specialized staff assigned to assist in the work of teaching the infants, three categories of caregivers were utilized to effect the work: three paraprofessionals, two paraprofessionals, and teens from Memorial High School. Two of the professionals were in their second year of handicapped infant work, both in the same program during 1977-1978; one professional was in her first year since graduation although she had had some experience in part time affiliation with other institutions. One of the paraprofessionals has had a number of years of experience with this work and was associated it during its three years of operation. The second paraprofessional had experience with other types of education but not with handicapped infants. The teens, of course, had no previous experience with this work.

The professionals and paraprofessionals participated in many inservice programs for the development of their knowledge and skills as a part of the program. They also had some opportunities to attend conferences and other educational programs. During the year, one of the paraprofessionals achieved her Child Development Associate certificate and was highly praised by the examiner for the quality of her caregiving activities. The teens were taught in regular classes about special education, work with the handicapped, and the specific caregiving functions they were to carry out in the practical portion of their program. The professionals, paraprofessionals, and the teens were observed both formally and informally throughout the year, using a variety of techniques and instruments, and feedback was given to enhance their development.

The instrument *Assessing the Behaviors of Caregivers: Infant Fold* was utilized as the basis for the development of a modification to meet the needs of the Edgewood project. The modification generally provided categories needed in the local program, such as those dealing with singing for the deaf and those not yet speaking; talk in conversational tone, added to accompany signing or any other activity in the program; and two items in technical physical therapy. Two corollary items were included: working with other caregivers and working with parents. Both of these were important in this project since the word *comprehensive* was carried into every phase of the work. Each of the new items was tested with the behaviors in 1977-1978 before inclusion in the instrument and provied to be valuable in monitoring the caregiving in this particular program. They should also be useful in other similar programs.

All items on the instrument were defined closely according to the current literature and any variations from the expected behaviors were followed up with explanations. In cases in which substantial interruptions or modifications in the usual educational program of the child were evidenced (the evaluator was in frequent attendance in the center and knew both the caregivers and the students well), reassessments of caregiver behavior were carried out. Thus, the behaviors described in the data tables and the narrative were reflective of the normal behaviors for that caregiver at that point in the year. Artificial or contrived conditions were kept to an absolute minimum and consisted almost entirely of occasional lengthening of the care

given to a particular child by a particular caregiver.

Trial measurement sequences were carried out with all participants to promote naturalness of the observations. The results of none of the trial periods were discussed with the participants since they were primarily to assure a reduction of nervousness and to allow the instruction to proceed normally. The actual assessment sequences consisted of three two-minute observation periods separated by two-minute break periods. An incidence was tallied once each twenty seconds (with a five second leeway for marking), thus a total of five tallies was possible within each period of each sequence. Means were calculated across the periods within each sequence and the maximum mean score was then five. Instrument items that would not be expected to occur because of the nature of the instruction were indicated by the newtral sign, $\pm$, to avoid zero cells that did not indicate the absence of expected behavior. The sign has been incorporated into the tables to clarify these same circumstances. Positive and negative signs were not utilized during the observations. They occur in the tables only in the columns for differences between the pre and post measurements.

A few sequences were interrupted because of unforeseen events that were not directly related to the instruction being undertaken: take a child to the bathroom, telephone calls, loudspeaker announcements, disturbances in the near proximity of the instructional site. These sequences were discarded and new ones begun when generally normal caregiver tasks were again undertaken.

The few cases in each of the caregiver groups, three teens, three professionals, and two paraprofessionals, indeed all eight of them combined, made statistical tests for significant differences between the pre and post tests mathematically untenable, as related in the original proposal. Mean frequencies for each of the test periods were calculated, along with differences between the two, for each individual and for the caregiver group. The narrative then explores the changes in the behaviors and describes the circumstances of each as appropriate to the analyses.

Equally important to the objectively measured behaviors was the frequent observations of the caregiving throughout the year by the evaluator. These served not only to provide internal evaluations to be incorporated into the training and supervisory conferences, but also helped provide the situational descriptions for the behaviors. Without these observations, inappropriate conclusions could have been drawn from some of the data.

## Teen Caregiver Behaviors

It is important to recognize that a rigorous selection of the teen participants was carried out before any were allowed to enroll and again during the first few periods of the year. Interested high school seniors were given the opportunity to visit the center, observe the care, and discuss the work with the staff. Those who signed up for the course, then, volunteered with a considerable knowledge of what would be expected and thus were able to make important judgments about themselves in the caregiving situations. Second, those that did come into the course had had a variety of experiences that in some ways made them apt for the caregiving tasks: younger brothers and sisters, youth programs, babysitting, and others. They thus, at the onset, exhibited a relatively high degree of desirable caregiver behaviors. That is to say, the descriptions of their behaviors and the changes over the eight month period, are not intended to be those that might be expected from any group of high school seniors that might be utilized in such a program in other

circumstances. The pre selection, together with the elimination of those that did not perform to standard during the early part of the year, produced a group of teens far more advanced than would normally be the case.

Language Facilitation

Three of the twelve language facilitation items began quite high with nearly all three teens: praises/encourages, offers help/solicitous remarks, and inquires/requests. These remained rather high throughout the period and one, praises/encourages, increased substantially. Their training emphasized this behavior and their experiences with verbal rewarding doubtlessly enhanced this factor in the work. The small, negative changes that occurred in some of these, due primarily to circumstancial events, did not indicate a relaxation of these behaviors. (Consult the Language Facilitation Table for the results.)

One behavior, gives information/rules, was observed infrequently during the beginning measurement period but increased considerably during the training period of eight months. Although this important caregiver behavior was seldom observed with the professional caregivers, it was emphasized in the evaluator conferences with the teens and they incorporated it into their work often and well by the end of the academic year.

Substantial gains were registered in three of the most important items of language facilitation: elicits vocalization, converses successfully, and labels sensory experience. Each of these began quite low in mean frequency per observation period and rose to a level of persistent behavior by the end of the year. A fourth, talks with signs, began with no observed frequency (none knew how to sign at the beginning of the year) but increased to a moderate level by the eighth month. While it must be noted that the teens did not acquire a wide sign "vocabulary" during the year, they made many appropriate uses of what they had learned.More importantly, they had learned that signing was a vital implement in gaining responses from children who could not speak or who had limited hearing or speaking ability. It must also be noted that the teens comprehended the use of signs as a way of repitition of behavior to be modeled.

Talks in conversational tone was emphasized as always needed when dealing with children that needed language facilitation. The early tendency of the teens was to "talk," but not necessarily to do so in conversational tone. All three of this year's teens made substantial progress on this item. Two, especially, were very adept at this technique; one of these had the second highest incidence measured in this item when compared to all the caregivers. The corollary to this item, talks without signs (when signs should be used), showed a decrease in incidence - a minus difference is desirable in this case.

The two remaining language facilitation items, reads/shows pictures and sings to/plays music, are very situational in context and their incidence very appropriately ranges from zero to five depending upon what is being taught and how. The teens exhibited these behaviors adequately when called upon to do so within the lessons.

In conclusion, the teens began the language facilitation exercises with a few behaviors relatively well developed. They further enhanced these individually and as a group. In four items of facilitation, the teens improved markedly. In a fourth item, talking and signing simultaneously, they made moderate growth. Their improvement was commendable.

Pre and Post Comparisons of Teen Caregiver Language Facilitation Behavior by Individual and Group Means per Observation Period

| Behavior | Teen 1 | | | Teen 2 | | | Teen 3 | | | All Teens | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif |
| 1. Elicits vocalization* | 1.3 | 4.0 | 2.7 | 1.0 | 4.0 | 2.7 | 1.3 | 3.7 | 2.4 | 1.2 | 3.9 | 2.7 |
| 2. Converses successfully* | 0.7 | 3.7 | 3.0 | 1.0 | 3.7 | 2.7 | 0.3 | 3.3 | 3.0 | 0.7 | 3.6 | 2.9 |
| 3. Praises/encourages | 1.3 | 3.3 | 2.0 | 1.0 | 3.7 | 2.7 | 1.3 | 4.0 | 2.7 | 1.2 | 3.7 | 2.5 |
| 4. Offers help/solicitous | 2.0 | 4.0 | 2.0 | 2.0 | 4.3 | 2.3 | 2.3 | 4.7 | 2.4 | 2.1 | 4.3 | 2.2 |
| 5. Inquires/requests | 2.3 | 3.7 | 1.4 | 2.3 | 4.3 | 2.0 | 2.0 | 3.7 | 1.7 | 2.2 | 3.9 | 1.7 |
| 6. Gives info/rules | .1 | 3.3 | 2.2 | 0 | 3.7 | 3.7 | 0 | 3.7 | 3.7 | 0 | 3.6 | 3.6 |
| 7. Labels sensory experiences | 0 | 2.7 | 2.7 | 0 | 3.0 | 3.0 | .1 | 3.3 | 3.2 | 0 | 3.0 | 3.0 |
| 8. Reads/shows pictures | ± | ± | ± | ± | ± | ± | ± | .7 | ± | ± | ± | ± |
| 9. Sings to/plays music | ± | .3 | ± | ± | ± | ± | ± | ± | ± | ± | ± | ± |
| 10. Talks in conversational tone | .3 | 4.7 | 4.4 | .3 | 4.3 | 4.0 | 1.0 | 5.0 | 4.0 | .5 | 4.7 | 4.2 |
| 11. Talks with signs* | 0 | 2.3 | 2.3 | 0 | 1.7 | 1.7 | 0 | 1.7 | 1.7 | 0 | 1.9 | 1.9 |
| 12. Talks without signs* | ± | 1.3 | ± | ± | 1.7 | ± | ± | 2.0 | ± | ± | 1.7 | ± |

NOTE: Only negative values would have been indicated but none occurred; numbers without signs are positive.

* Limited by characteristics of the child. Zero indicates behavior should have been evidenced but was not; ± indicates the behavior was not necessarily expected or could not be utilized.

** Applicable only when caregiver should have signed, thus the mean indicates a negative behavior; ± is given when teens did not yet know signs.

*Two Year Comparison - Language Facilitation*

*The 1978-1979 teen group as a whole began about like the 1977-1978 group. They showed previous experience with infants and an aptitude for the work. They were helpful and solicitous; they gave few rules, did not often talk in conversational tone, and were spare with their praise. They never labeled sensory experience. By the end of the year, however, they demonstrated a substantial use of all of the language facilitation techniques. The 1978-1979 teen group, however, showed greater growth in labeling sensory experience, in praising, and in talking in conversational tone. It is particularly notable that one teen, in 1978-1979, adopted the latter technique to near perfection and the incidence of her usage of it was at an unusually high level; in general, her usage of the language facilitation techniques, as measured in this comparison, was higher than the professionals and second to a paraprofessional. As a whole, the 1978-1979 teens demonstrated a high level of learning of the language facilitation methods.*

Social/Emotional Behavior

Nearly no negative behaviors listed in the instrument were observed either during the general program monitoring of the teen caregivers or during the assessment sequences. Those few that occurred were exclusively of the restraining type of behavior, entirely appropriate for the occasion. This is of great credit to the teens themselves and to their instruction.

Three of the social/emotional items began at a moderate level and increased by the time of the post assessment: smiles at child, uses loving/reassuring tones, and eye contact for attention. The first two are very important characteristics in the ideal caregiver and the fourth an important technique for the assessment and management of instruction. All three teens increased the use of these techniques during the training period. A fourth item, physical/loving contact, did not appear during the beginning assessments and increased somewhat during the year but still somewhat lower than the ideal for this item, that demonstrated by one of the paraprofessionals.

Plays social games with the child is an item that would not normally be of high incidence within restricted observation periods since it utilizes considerable time from planned instruction in most instances. Only one of the teens used it during the pre assessment sequences. Two used it during the interim assessment (not reported herein since it was primarily formative in intent). Only one used the technique and that only one time during the post assessment. This is not an unusual occurrence.

Generally, the social/emotional behaviors of the teens were positive, grew appropriately during the training, and were sufficiently high so as to enhance the caregiver program. Some increase in emphasis, and perhaps on the techniques of loving contact, was somewhat lower than might be expected for caregivers in general but not unexpected with beginning experiences in the program.

*Two Year Comparison - Social/Emotional Behavior*

*Both the 1977-1978 and the 1978-1979 teen groups progressed somewhat in these items and to about the level that would be expected. In both years, the use of loving tones was the highest. Eye contact increased both years. Negative mands were rare for both groups. Social/emotional behaviors were moderately demonstrated for teens.*

Pre and Post Comparisons of Teen Caregiver Social/Emotional Behavior by Individual and Group Means per Observation Period

| Behavior | Teen 1 | | | Teen 2 | | | Teen 3 | | | All Teens | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif |
| *Negative* | | | | | | | | | | | | |
| 1. Criticizes, scolds, threatens | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. Forbids, negative mands | 0 | 0 | 0 | .1 | .1 | 0 | 0 | .3 | .3 | 0 | .1 | .1 |
| 3. Frowns, restrains | .1 | .3 | .2 | .3 | .3 | 0 | 0 | 0 | 0 | .1 | .2 | .1 |
| 4. Punishes physically | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Isolates child (B mod) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. Ignores when needs attention | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Positive* | | | | | | | | | | | | |
| 1. Smiles at child | 2.0 | 3.0 | 1.0 | 1.0 | 3.3 | 2.3 | 1.3 | 4.3 | 3.0 | 1.3 | 3.5 | 2.2 |
| 2. Uses loving/reassuring tones | .7 | 3.7 | 2.0 | 1.0 | 3.7 | 2.7 | 1.3 | 4.7 | 3.4 | 1.0 | 4.0 | 3.0 |
| 3. Physical/loving contact | .3 | 2.3 | 2.0 | 0 | 2.3 | 2.3 | .3 | 2.3 | 2.0 | .2 | 2.3 | 2.1 |
| 4. Plays social games with child | 0 | 0 | 0 | 0 | .1 | .1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Eye contact for attention | 1.7 | 3.7 | 2.0 | .7 | 2.7 | 2.0 | 2.0 | 4.0 | 2.0 | 1.1 | 3.4 | 2.3 |

NOTE: All values were positive; no negative differences occurred.

Piagetian Behaviors

Only three of the seven Piagetian items occur frequently in untrained behavior: imitation, use of small muscle skills, and new schemes. And even these are generally limited in their incidence except as spontaneous activities. As would be expected, the three occurred with the teens at the beginning of the year in moderate amounts. All the other behaviors did not occur or were in very minor incidence. At the end of the year, the three had not increased to any appreciable degree, as would be expected - the teens had learned other instructional behaviors and were demonstrating them. Additionally, they were more adept at their caregiving generally and did not need to resort to as much imitation nor as many new schemes. Small muscle manipulation remained at about the same level as at the beginning of the year - moderate in both cases.

Four of the most important Piagetian tasks were not demonstrated during the pre assessment sequences: object permanence, means and ends, causality, and space orientation. Generally these are the most technical of the behaviors and are seldom developed well by accident or family imitation. The growth of these four was quite even between two of the participants and superior for the third. There was a notable growth in these activities among the 1978-1979 teens. Apparently the conferences held after the pre assessments and the interim measurements had substantial effects. The instruction, more sharply honed than during the first year, was effective in the Piagetian behaviors.

Object permanence increased slightly among the teen activities but it had begun at a slightly higher level than might have been expected. The teens showed that they understood this activity and they carried it out with aplomb.

*Two Year Comparisons - Piagetian Behaviors*

*The three teens that participated for the entire academic year showed exceptional growth. Their utilization of means and ends, causality, and spatial orientation was laudatory. On these three items, and nearly so with object permanence, the 1978-1979 teens were superior to those in the program in 1977-1978. Both the teens and the instructors are to be congratulated for the exceptional development in these Piagetian tasks.*

Other Behaviors

Some of the other behaviors listed on the instrument were observed with the 1978-1979 teens. They at times assisted with vestibular/kinetic stimulation, large muscle play, feeding, toileting, washing, and physical shepherding. While none of these was included in their assigned activities for the assessment, they participated in these to a much greater extent than during the previous year. They worked with other staff at about the same rate as the previous year but were noted to be assigned more technical and difficult tasks. They were not observed in either working with parents nor in record keeping, as would be expected.

*Two Year Comparisons - All Behaviors*

*The general application to the tasks of the caregiver was superior during 1978-1979 than in 1977-1978. The teens learned more, demonstrated unusual confidence in working with the children, and in fact were quite professional in all their work by the end of the year. All three were well trained. The teens and their instructors are to be commended for this excellent development.*

Pre and Post Comparisons of Teen Caregiver Piagetian Behaviors by Individual and Group Means per Observation Period

| Behavior | Teen 1 | | | Teen 2 | | | Teen 3 | | | All Teens | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif | Pre | Post | Dif |
| 1. Object permanance | .1 | 2.3 | 2.2 | 1.1 | 3.3 | 2.2 | .7 | 3.3 | 2.6 | .6 | 2.9 | 2.3 |
| 2. Means and ends | 0 | 3.1 | 3.1 | 0 | 2.7 | 2.7 | 0 | 3.3 | 3.3 | 0 | 3.0 | 3.0 |
| 3. Imitation | 2.0 | 2.0 | 0 | 3.0 | 3.3 | .3 | 2.7 | 3.0 | .3 | 2.6 | 2.8 | .2 |
| 4. Causality | 0 | 2.0 | 2.0 | 0 | 2.0 | 2.0 | 0 | 2.3 | 2.3 | 0 | 2.1 | 2.1 |
| 5. Small muscle skills | 2.0 | 2.0 | 0 | 1.7 | 3.3 | .7 | .7 | 3.0 | 2.3 | 1.4 | 2.4 | 1.0 |
| 6. Spatial role/orientation | 0 | 2.0 | 2.0 | 0 | 2.3 | 2.3 | 0 | 2.3 | 2.3 | 0 | 2.2 | 2.2 |
| 7. New schema | 2.3 | 2.3 | 0 | 3.4 | 1.7 | -1.7 | 2.7 | 2.0 | - .7 | 2.6 | 2.0 | - .6 |

NOTE: Minus values on the differences between pre and post assessment frequency means are indicated; all other values are positive.

APPENDIX X: PRE-POST ASSESSMENT SUMMARY

DESCRIPTIVE DATA

A total of 22 children were attending CIIP regularly at the time of post-assessments. Of this 22, 12 had received services since September; 2 had dropped (one due to transfer, and one due to illness) after mid-year testing; and 8 began receiving services after mid-year.

Of the 22, 5 were primarily language delayed/mildly handicapped, 1 was severely hearing impaired, 6 were Down's Syndrome, 2 were visually impaired (one S/PH), and the remainder showed low moderate to severe developmental delays with physical handicaps.

PROCEDURAL DATA

To determine gains the following procedures were followed:

1) the total items passed in a developmental area were compared with the total items possible in that area for the child's chronological age. For example: 67/76 = 88%. Thus a base "developmental rate" of .88 was established at the time of the Pre-test.
2) this same procedure was followed at the time of Post-testing. Note that the total possible items would increase as a function of greater chronological age. For example, for the child above, post scores were 76/79 or 96%.
3) though gain is evident in the percentage scores, an additional procedure was completed: .88 X 79 = 70 items which the child would have been expected to gain if his developmental rate had remained unchanged. Note: the use of developmental rates is accepted in current EC-H research practices due to ethical and practical problems in establishing control groups.

4) at this point, we have the following information for one developmental area:

   -items passed on pre-test = 67

   -items passed on post-test = 76

   -items expected or <u>projected</u> to be passed = 70

   -<u>actual gain</u> = 9

   -<u>projected gain</u> = 3 (70-67 = 3)

5) in this manner, actual gain and projected were computed for each of 7 areas tested (gross motor, coordination, conceptual, receptive language, expressive language, socialization, and self-help) and for each of the 22 children. Actual gain was totaled across areas as was projected gain to yield a total projected gain and a total actual gain.
(See one-child sample following this page)

CHILD #21 C.A: Pre- 33 mo. ; Post- 37 mo.

TOTAL ACTUAL GAIN: 44

TOTAL PROJECTED GAIN: 15

GROSS MOTOR actual gain: 9

Pre-Test: 67/76 88% Projected Post: 70/79

Post-Test: 76/79 96% Projected Gain: 3 (70 - 67)

COORDINATION actual gain: 10

Pre-test: 60/75 80% Projected Post: 62/78

Post-Test: 70/78 90% Projected Gain: 2 (62 - 60)

CONCEPTUAL actual gain: 13

Pre-Test: 42/65 65% Projected Post: 44/67

Post-Test: 55/67 82% Projected Gain: 2

RECEP. LANGUAGE actual gain: 2

Pre-Test: 16/36 44% Projected Post: 17/38

Post-Test: 18/38 47% Projected Gain: 1

EXPRE. LANGUAGE actual gain: 2

Pre-Test: 23/46 50% Projected Post: 24/48

Post-Test: 25/48 52% Projected Gain: 1

GEN. SOCIALIZATION actual gain: 4

Pre-Test: 60/45 80% Projected Post: 62/78

Post-Test: 64/48 82% Projected Gain: 2

SELF-HELP actual gain: 4

Pre-Test: 42/58 72% Projected Post: 46/64

Post-Test: 46/64 72% Projected Gain: 4

## INTERPRETATIVE DATA

This section will discuss the data presented as a result of the procedures discussed. Four Figures summarizing this data are attached. Figure 4 compares actual and projected gains totaled for all 22 children in each of the 7 areas. Figures 1-3 show the same data totaled for each of the classrooms (Levels). Level I data relates to the lower functioning children taught by the teacher/physical therapist; Level II data relates to moderately involved children seen by the teacher/Teen coordinator; and Level III data relates to the mildly-moderately involved children seen by the teacher/speech therapist.

### Total Group Data

This data shows the greatest gains in the areas of gross motor, language, and socialization. This data is supported by an analysis of individual scores. The majority of children doubled (or more) their expected gains in these areas.

The areas of lesser gain are shown to be coordination, conceptual, and self-help. Again this data is borne out by individual analyses. In these areas, the children only met or minimally exceeded their expected gains.

### Classroom Data

A review of Figures 1-3 shows a readily apparent difference in gain patterns among classes. This difference is also borne out when totals are grouped by child rather than by area.

Level III data shows the greatest gains. Note that though these were also the more mildly handicapped children, this data compares each child with himself so that expectations were also higher for this group.

Level I data, while following the same general pattern across

areas but with much less difference between projected and actual gains. Note that projected gain is that gain projected to occur if the child continued at the same rate of progress as before intervention. Level I, managed by the teacher/physical therapist shows less gains in receptive language, socilization, and self-help. Comparing the slopes of the actual gain line in Level I to the slope lines in Level II and Figure 4, we see much similarity with the general pattern following Fig.4 closely but differing somewhat with Figure 2 in gross motor, coordination, language, and self-help.

Level III data shows the weakest gains, with actual gain not even matching projected gain in two areas (conceptual and self-help), and only barely matching in another (coordination); and with all gains being lower than in Levels I and II.

CONCLUSIONS

1. Overall gain was good in all areas, especially in language and socialization.
2. There appeared to be difficulty in programming as effectively in the areas of coordination , conceptual, and self-help.
3. Several variables appear to have influenced this outcome:
    a) decrease in use of programming cards after mid-year
    b) staff difficulty with effective communication about and programming for child-mother interaction patterns in several cases where the child was working on autonomy-separation issues
    c) high degree of absenteeism due to the cold weather
    d) in the director's opinion as well as in the evaluator's, staff performance in two cases was significantly poorer during the second semester. (This impression has been documented in the evaluator's reports.)